ARCTIC DATA COMPILATION AND APPRAISAL
VOLUME 1
Beaufort Sea: Physical Oceanography - Temperature, Salinity, Currents and Water Levels

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1982

CANADIAN DATA REPORT OF
HYDROGRAPHY AND OCEAN SCIENCES
NO. 5

Canada

Canadian Data Report Of Hydrography and Ocean Sciences

These reports provide a medium for the documentation and dissemination of data in a form directly useable by the scientific and engineering communities.

Generally, the reports will contain raw and/or analyzed data but will not contain interpretations of the data. Such compilations will commonly have been prepared in support of work related to the programs and interests of the Ocean Science and Surveys (OSS) sector of the Department of Fisheries and Oceans.

Data Reports are produced regionally but are numbered and indexed nationally. Requests for individual reports will be fulfilled by the issuing establishment listed on the front cover and title page. Out of stock reports will be supplied for a fee by commercial agents.

Regional and headquarters establishments of Ocean Science and Surveys ceased publication of their various report series as of December 1981. A complete listing of these publications and the last number issued under each title are published in the *Canadian Journal of Fisheries and Aquatic Sciences*, Volume 38: Index to Publications 1981. The current series began with Report Number 1 in January 1982.

Rapport statistique canadien sur l'hydrographie et les sciences océaniques

Ces rapports servent de véhicule pour la compilation et la diffusion des données sous une forme directement utilisable par les scientifiques et les techniciens.

En général, les rapports contiennent des données brutes ou analysées mais ne fournissent pas d'interprétations des données. Ces compilations sont préparées le plus souvent à l'appui de travaux reliés aux programmes et intérêts du service des Sciences et Levés océaniques (SLO) du ministère des Pêches et des Océans.

Les rapports statistiques sont produits à l'échelon régional mais sont numérotés et placés dans l'index à l'échelon national. Les demandes de rapports seront satisfaites par l'établissement auteur dont le nom figure sur la couverture et la page de titre. Les rapports épuisés seront fournis contre rétribution par des agents commerciaux.

Les établissements des Sciences et Levés océaniques dans les régions et à l'administration centrale ont cessé de publier leurs diverses séries de rapports depuis décembre 1981. Vous trouverez dans l'index des publications du volume 38 du *Journal canadien des sciences halieutiques et aquatiques*, la liste de ces publications ainsi que le dernier numéro paru dans chaque catégorie. La nouvelle série a commencé avec la publication du Rapport n° 1 en janvier 1982.

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PREFACE

This group of data catalogues is produced by the Ocean Information Division at the Institute of Ocean Sciences. Joint government/industry contract projects have catalogued marine data sets focusing primarily upon oceanography and fisheries. Data set quality appraisals are provided to assist in establishing the usefulness of certain data for particular kinds of analyses and the confidence to be placed in interpretations. This will assist in setting priorities for incorporating the most useful data in the national Marine Environmental Data Service (MEDS) archives. Additional uses range from contributing to research planning, especially for climatological studies, to providing the best available resume of marine data sources for environmental assessments.

Accompanying the accelerating pace of Arctic offshore development activity is the need to review the sufficiency and suitability of available scientific information for design, regulatory and planning purposes. These volumes are divided among three phases: the first phase involves compilation and appraisal of all existing data sets; the second concentrates upon analysis of the suitability of the historical data for contributing to questions of particular interest; while the third relates primarily to analysis and/or interpretation of data and estimation of the scientific confidence in answering particular questions.

Dr. Alan B. Cornford
Scientific Editor
Arctic Data Compilation
and Appraisal Series

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Can. Data Rep. Hydrogr. Ocean Sci. 5

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ABSTRACT

Cornford, A.B., D.D. Lemon, D.B. Fissel, H. Melling, B.D. Smiley, R.H. Herlinveaux and R.W. Macdonald. Arctic Data Compilation and Appraisal. Volume 1. Beaufort Sea: Physical Oceanography - Temperature, Salinity, Currents and Water Levels.
Can. Data Rep. Hydrogr. Ocean Sci. 5: 279 p

This volume is one of a group of catalogues designed to compile and appraise marine data sets for the Canadian Arctic. For user convenience, the group has been organized with its subject matter divided into three general disciplines: physics, chemistry and biology. The Arctic has been arbitrarily divided into seven geographical areas incorporating, where possible, major oceanographic regions. The format throughout has been structured to facilitate comparison among subjects and regions. With such a large undertaking it is not possible to provide all reports at once. Therefore catalogues at present available in the series are indicated on the inside back cover of each volume.

Data collection is a continuing process and further updates of the catalogues are planned. Readers are requested to submit corrections and additions by writing the issuing establishment. Such corrections will be incorporated in on-line computerized data set listings and will be continuously available upon request.

SOMMAIRE

Cornford, A.B., D.D. Lemon, D.B. Fissel, H. Melling, B.D. Smiley, R.H. Herlinveaux and R.W. Macdonald. Arctic Data Compilation and Appraisal. Volume 1. Beaufort Sea: Physical Oceanography - Temperature, Salinity, Currents and Water Levels.
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Le présent volume fait partie d'un groupe de catalogues destinés à compiler et à évaluer les séries de données marines sur l'Arctique canadien. Pour plus de commodité, la question traitée est structurée en trois grandes disciplines: physique, chimie et biologie. L'Arctique a été divisé arbitrairement en sept régions géographiques qui englobent autant que possible les grandes régions océanographiques. Les catalogues sont présentés de façon à faciliter la comparaison entre les sujets et les régions. Le domaine est si vaste qui'il est impossible de fournir tous les catalogues en une seule fois. Les catalogues de la série actuellement disponibles sont indiqués à la fin de chaque volume à l'interieur de la couverture.

La collecte des données est un processus permanent et il est prévu de mettre à jour les catalogues par la suite. Les lecteurs sont invités à soumettre par écrit les corrections et les additions à l'établissement auteur. Ces corrections seront traitées en direct sur ordinateur et incorporées aux listages qui pourront être obtenus sur demande.

ACKNOWLEDGEMENTS

The authors wish to express their thanks to the many different people and organizations who assisted with information and data during the course of the compilation. In particular, we wish to thank the Marine Environmental Data Service in Ottawa and the National Oceanographic Data Center in Washington, D.C., for access to their data files; S. Huggett and F. Stephenson of the Institute of Ocean Sciences and J.W. MacDonald of Environmental Sciences Ltd. for the provision of data and many helpful discussions; and Dr. T.O. Manley of Lamont-Doherty Geological Observatory for provision of the AIDJEX data. Information and assistance received from Dr. J.E. Keys, Dept. of Indian and Northern Affairs; Dr. S. Prinsenberg, Canada Centre for Inland Waters; Dr. R.B. Tripp, University of Washington; Dr. E.R. Pounder, McGill University; Dr. E. Sadler, Defence Research Establishment Pacific and D. Thomas, Seakem Oceanography Ltd., are also gratefully acknowledged. Special thanks are also due to S. Luscombe, S. Norton and B. Clarke of Arctic Sciences Ltd. for their dedication in preparing the manuscript, and to K. Creighton, K. Holman, B. Watt and P. Kimber of the Institute of Ocean Sciences for preparation of the maps.

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ARCTIC DATA COMPILATION
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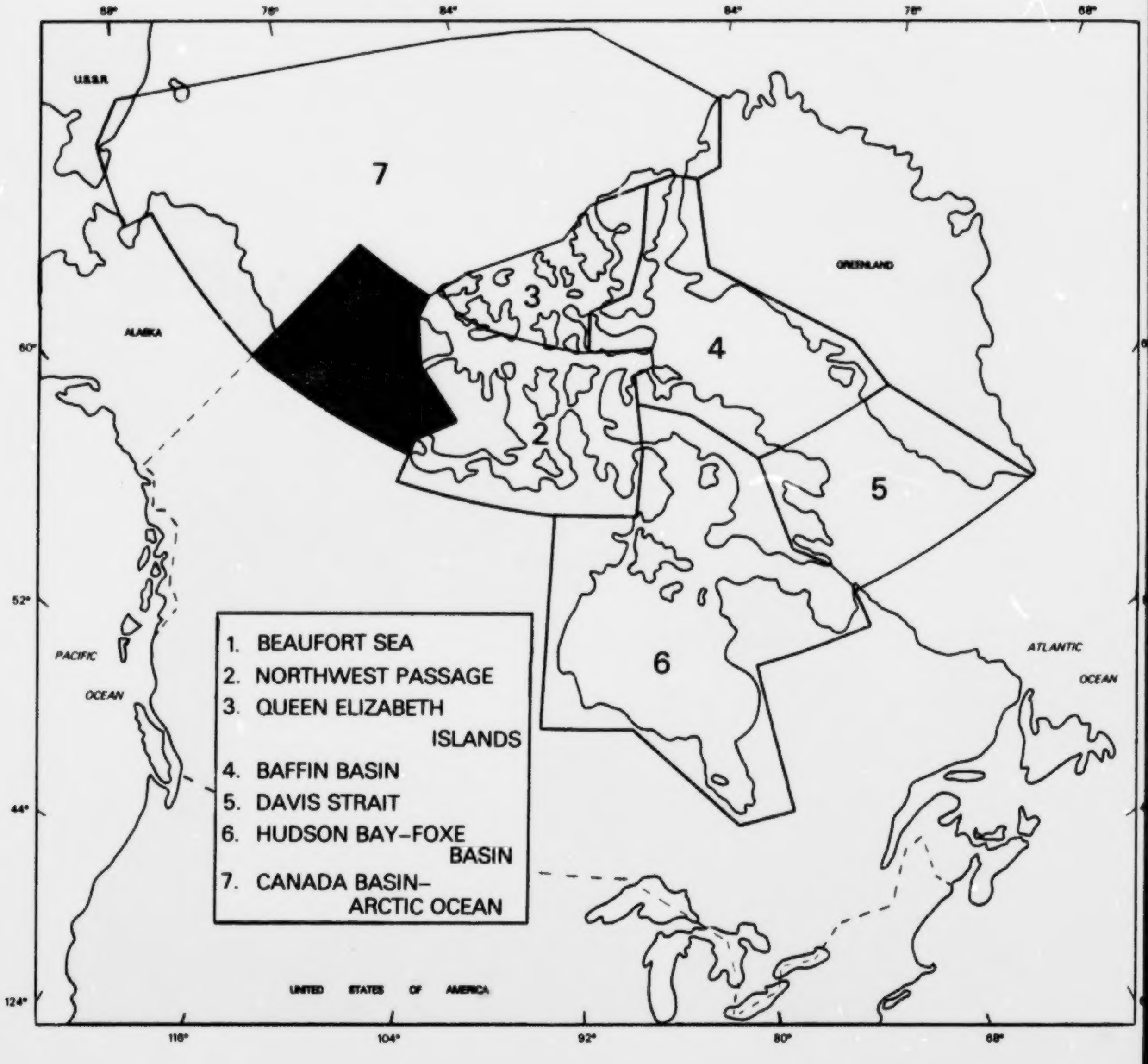
VOLUME 1
Beaufort Sea: Physical Oceanography



The area covered by this volume is shaded in the map above.

VOLUME 1: Beaufort Sea: Physical Oceanography
Temperature, Salinity, Currents, and Water Levels

VOLUME ABSTRACT

This inventory contains a catalogue of all physical oceanographic data from the Beaufort Sea and Amundsen Gulf. Times and locations of measurements are listed and displayed graphically for temperature-salinity, current meter, water level and drifter data. Meteorological and ice information are not included. Yearly plots showing the locations of all measurements are included, as are indexes by area and measurement types. References and sources are listed for all data included in the inventory.

Key words: Amundsen Gulf, Beaufort Sea, currents, data, inventory, salinity, temperature, tides, water properties.

1. INTRODUCTION

During the past thirty years, over eighty distinct sets of physical oceanographic data have been collected in the southeastern Beaufort Sea. These data were obtained from U.S. and Canadian icebreakers (1950's), hydrographic surveys (1960's and 1970's), the Arctic Ice Dynamics Joint Experiment (AIDJEX) (1970-76), the Beaufort Sea Project (1974-75), oil industry data (1970's and continuing) and other sources. The quantity of data is relatively large in comparison with other areas of the Canadian Arctic. However, many of the data sets have not received rigorous analysis, and have never been examined in combination.

As a first step toward those objectives the existing data (up to 1982) were thoroughly and carefully compiled. This inventory presents a catalogue of the data sets, available information concerning collection methods and accuracies and a preliminary appraisal of their utility for further analysis. The appraisal examined the coverage of the data sets in space and time and their comparability with each other.

The inventory includes the following data: water properties (temperature and salinity), current meter, surface drift and water level measurements. It does not include ice drift, ice coverage or meteorological data. This inventory is part of an ongoing program designed to preserve its utility by keeping it up to date. Information about new data sets, older sets which are not in the catalogue, or errors in the catalogue should be submitted as described in the series introduction.

2. STUDY AREA

The study area is that portion of the Beaufort Sea lying to the south of 75°N latitude, to the east of 141°W longitude and bounded on the south and east by the coastline of the Northwest Territories, Banks and Victoria Islands, as illustrated in Figure 1a. The area includes Amundsen Gulf, a large semi-enclosed basin of water freely connected to the Beaufort Sea to depths of 325 m.

The bathymetry of the area (Figure 2) is characterized by several distinctive features. A broad, shallow continental shelf borders the mainland coast and the west coast of Banks Island. The edge of the shelf lies between the 100 and 200 m isobaths and may be as far as 100 km from shore, with depths of less than 10 m being found as much as 30 km offshore. Depths increase rapidly over the continental slope. The depth gradient is particularly large from the 100 m to the 1,000 m isobath; beyond, the bottom depth increases more gradually with distance offshore over the continental rise, and eventually the bottom levels out at about 3,600 m, in the relatively flat Canada Abyssal Plain.

The shelf is broken in two places in the study area: in the west off Herschel Island, where the Herschel Canyon has depths of 100 m or more within 35 km of the coastline; and in the east, where a deep trough (325 m) connects Amundsen Gulf with the Beaufort Sea. Amundsen Gulf proper has depths in excess of 600 m, and relatively steep sides. A similar trough connects the Beaufort Sea with M'Clure Strait in the northeastern portion of the study area.

An important factor in collecting Arctic oceanographic data is the sea-ice coverage. Where present in sufficient quantity and thickness, sea-ice can provide a stable platform for the collection of oceanographic data (e.g. current and CTD data from ice island T-3 and from the AIDJEX studies). However, sea-ice can often hinder data collection by restricting ship operations in the summer months and by damaging subsurface instrumentation placed above the sea-floor. There are two major forms of sea-ice in the Beaufort Sea: landfast ice that is attached to the shore, extending to variable distances offshore; and pack ice, which occupies the central portion of the Arctic, moving under the influence of winds and currents. The landfast ice is a seasonal phenomenon, beginning to form in late September or early October. Deterioration of the ice begins as early as March, when large leads form west of Banks Island with subsequent clearing from the western portions of Amundsen Gulf. In late May, land runoff begins to accumulate at the mouth of the Mackenzie River and by late June, open water season has begun.

The pack ice is composed largely of multi-year ice as well as some first-year ice floes and ice islands. The pack ice often retreats in the summer months; the variations in the extent of its retreat are illustrated in Figure 3.

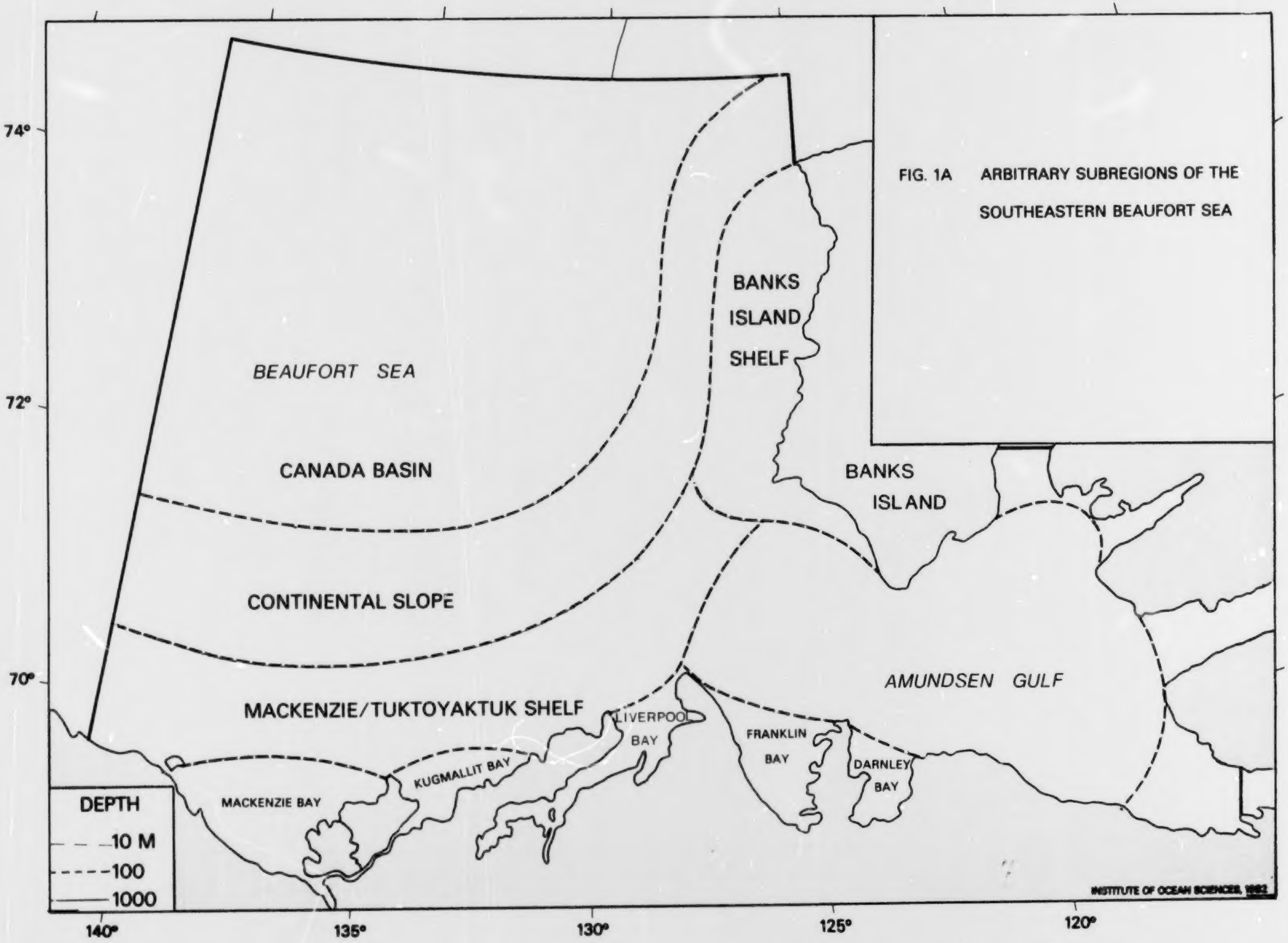


FIG. 1A ARBITRARY SUBREGIONS OF THE SOUTHEASTERN BEAUFORT SEA

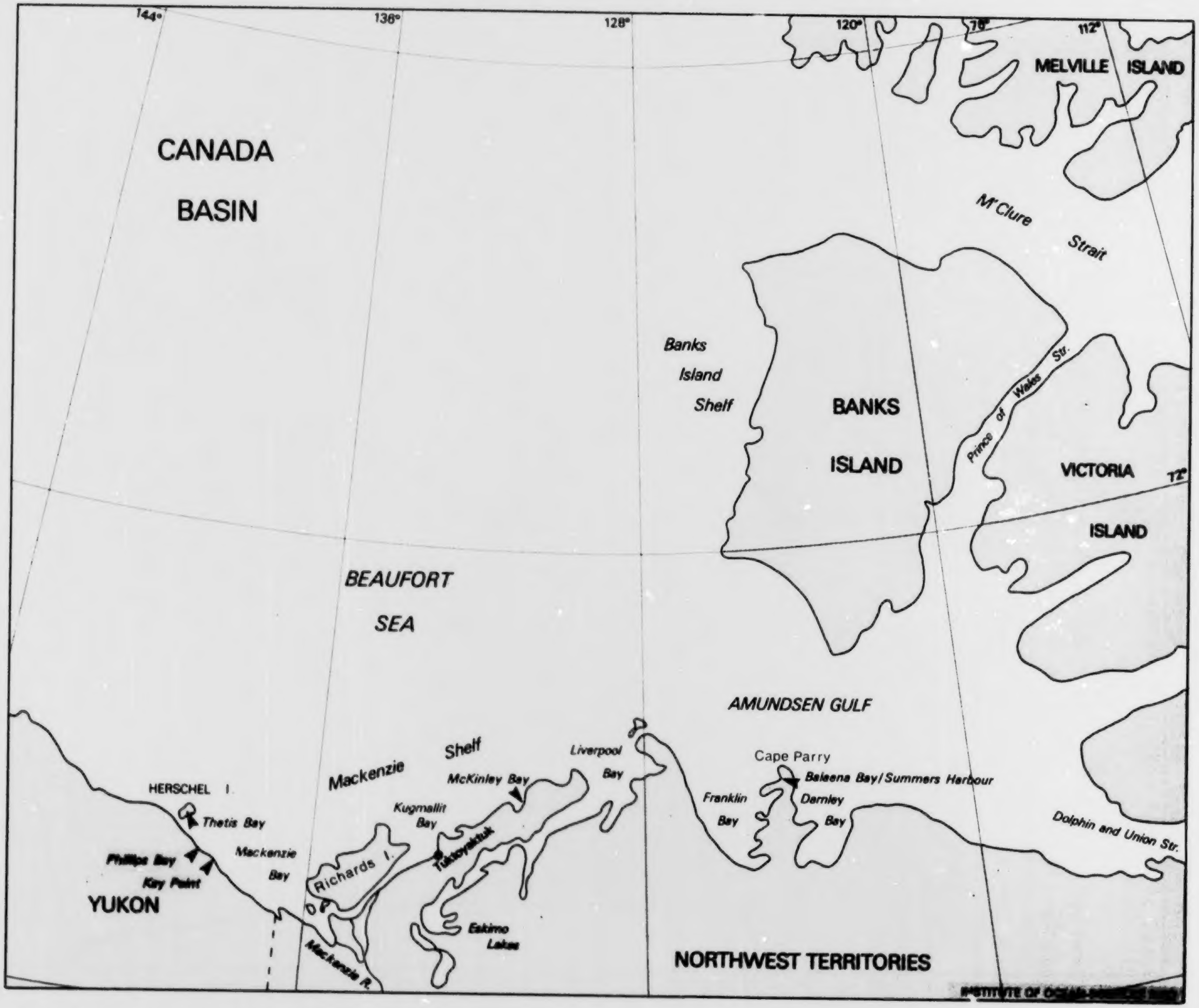


Figure 1B: Place names of the study area.

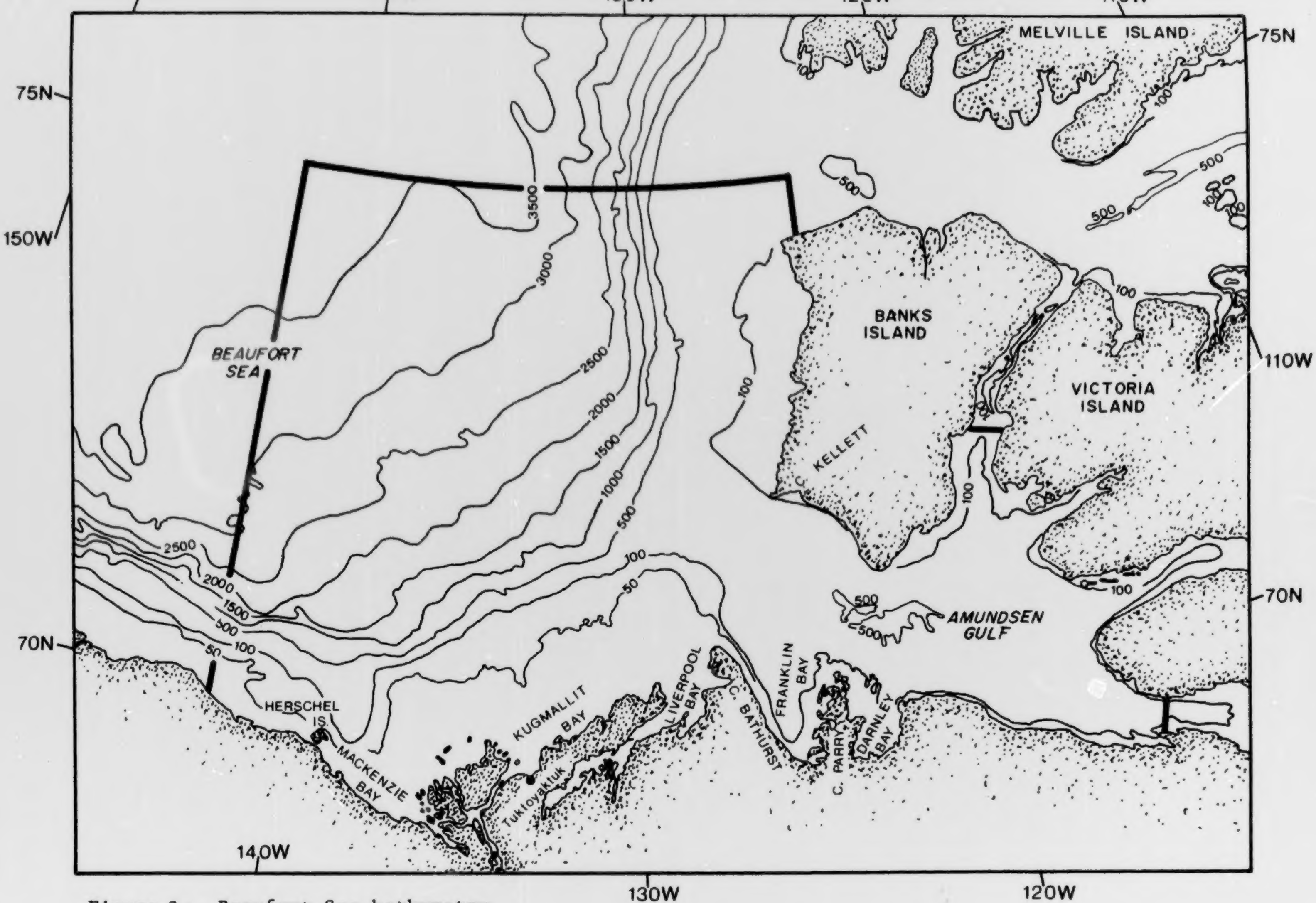


Figure 2: Beaufort Sea bathymetry.

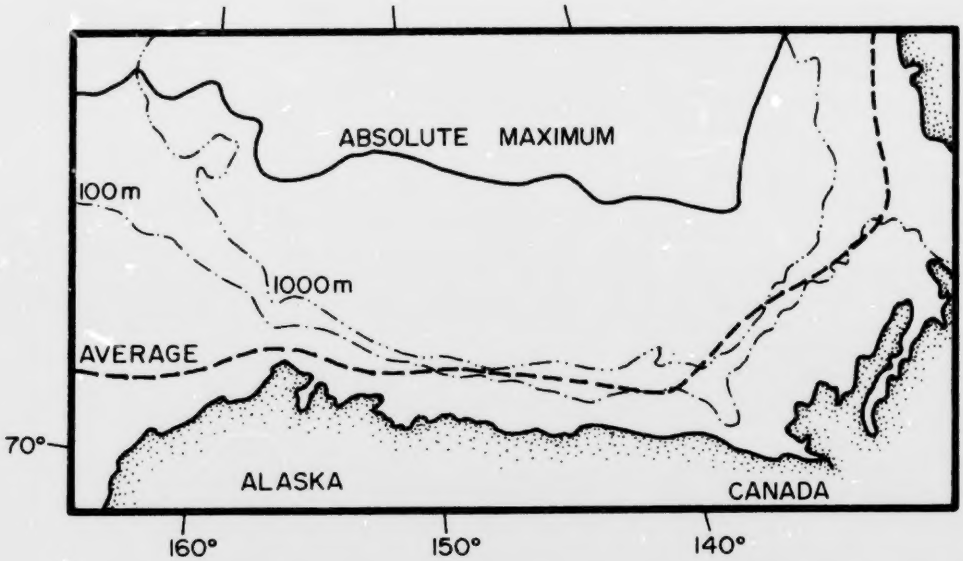


Figure 3: The average and maximum retreat of the summer pack ice

The deep portions of the Beaufort Sea contain the three water masses which make up the Arctic Ocean (Coachman & Barnes, 1961). The surface layer (the Arctic Water) is below $0^{o}C$ in temperature and is quite dilute and well mixed down to about 50 metres. Its salinity increases quickly with depth to 150 or 250 metres, at which depth the second water mass, the Atlantic Water is found. The Atlantic Water extends to about 900 m, and has temperatures about $0^{o}C$ and salinities of 34.5 to 35.0. Below 900 metres there is the Bottom Water, with temperatures below $0^{o}C$ and salinities between 34.93 and 34.99. In the areas of the Beaufort Sea where open water occurs in the summer, the near-surface portion of the Arctic Water becomes further diluted by melting ice and runoff, and is warmed by the sun. The Mackenzie River supplies a large volume of fresh water to the mainland shelf, and occasionally to the entrance of Amundsen Gulf.

The circulation of the deep portions of the Beaufort Sea is dominated by the Beaufort gyre which moves clockwise around the basin. The circulation on the continental shelf is much more complex, and depends chiefly on the wind and the outflow of the Mackenzie River.

3. HISTORICAL BACKGROUND

3.1 EARLY HISTORICAL DATA

Information on the physical oceanography of the southeastern Beaufort Sea collected before the 1950's was usually incidental to other purposes such as geographical exploration, and therefore tends to be less reliable and complete than later data collected expressly for oceanographic research. The first information on currents was likely collected by the local Inuit population in anecdotal form. When European ships began to enter the area in the 1850's, currents as deduced from observed ship drift under calm winds and ice movements along with surface water temperatures were for the first time recorded (Collinson, 1889). Scientific expeditions to the area were undertaken after the turn of the century, with the most notable of these being the expeditions led by Stefansson (1921) from 1913 to 1917. Since the primary scientific objectives encompassed many disciplines, only limited information on currents and water properties were obtained. More recently, surface temperature and salinity data were collected by Captain Larsen of the R.C.M.P. vessel St. Roche in 1935 and 1937 (Tully, 1952).

3.2 POST-WORLD WAR II DATA

Following the Second World War, defence requirements led to several oceanographic cruises to the area aboard both Canadian and American icebreakers. For the first time, sufficient oceanographic data, consisting primarily of vertical profiles of temperature and salinity at many different locations, were collected to describe the circulation of the area. However, the description was necessarily based on indirect methods, either the dynamic method (Fomin, 1964) or methods using the horizontal distribution of water properties as tracers of water movements. Some direct measurements of currents were collected from the icebreaker cruises, but these were of such a short duration (from a single reading to a period of several hours) that the values could not be taken as being representative of the net circulation.

By the early part of the 1960's, large-scale oceanographic cruises to the area became increasingly rare. However, cruises in smaller vessels covering smaller nearshore areas (often as part of biological studies) collected a considerable amount of shallow water temperature and salinity profile data.

In the 1970's, oceanographic surveys were carried out as part of the search for oil and gas in the Beaufort Sea. These programs made use of modern oceanographic instrumentation for the first time in this area, including self-recording current meters to provide long-term direct measurements of currents and continuous profiling CTD (Conductivity-Temperature-Depth) probes. Both government and oil industry groups were involved in collecting data. The most intensive program, the Beaufort Sea Project (1974 to 1975), was a joint government-industry undertaking.

The use of ice as a measuring platform is a well established technique in Arctic oceanography. In the southeastern Beaufort Sea, deep water bottle casts were obtained from ice island T-3 in 1959 (Kusunoki, 1962). More recently, extensive sets of oceanographic data, including current meter measurements, were collected from the pack ice as part of AIDJEX both in the pilot programs of 1970 and 1971 and during the main experiment of 1975 to 1976.

4. GENERAL REPORT LAYOUT AND USER INSTRUCTIONS

4.1 DATA SETS

The data are organized in sets, where each set consists of data of a common type taken on a single expedition or cruise, usually by a single institution or organization. Thus, unless otherwise noted, all the data within a single set is assumed to have been collected in a uniform manner and should conform to a common standard of measurement.

Each data set has been assigned an identification number of the form yy-nnnn, where yy = last 2 digits of the year in which data were collected and nnnn = order of identification for that particular data set for that year. The data set number is a unique identifier which applies throughout the entire series of inventories; any set identified, for example, as 72-0009 is the same data set no matter where the reference to it is made. Gaps may appear in the sequence of data set numbers in this inventory for a particular year, because each data set will not appear in every discipline and geographical area.

4.2 INVENTORY ORGANIZATION

Table 1 lists all the data sets in the inventory in order by data set number. It provides a summary description of each set including the times, areas and methods of measurements. Table 1 also gives a listing of concurrent measurements from other disciplines.

Geographical and measurement type indexes are in Section 10. The subareas in the geographical index are shown on the map in Figures 1a and 1b. Section 10 also contains an index of references, ordered by data set number. It is primarily an index of data reports, although papers analyzing or discussing the data are listed if they came to our attention.

Measurement locations are plotted in a series of maps in Section 9. There are two standard maps. Both are in Lambert Conformal Conic projection with standard parallels of 71^{o}N and 73^{o}N. The map showing the entire area is at a scale of 1:4 680 000, and is shown in Figure 4. A second map (Figure 5) is used to show the nearshore area in greater detail when the density of data points warrants it. This region (delineated by the shaded border in Figure 4) is shown at a scale of 1:2 706 000. In both cases, the coastlines have been smoothed and small islands have been removed to avoid clutter. No grid of latitude and longitude has been plotted on the maps. The grids are available on transparent sheets (inside the back cover) which may be placed over the data location maps to measure coordinates when desired. A key to the interpretation of the symbols on the maps is at the beginning of Section 9.

Detailed listings of the times and locations of individual measurements are in Section 11. There is a separate listing for each data type. The beginning of Section 11 explains the format of the listings.

Data sets were rated according to the criteria in Section 5. The ratings are listed in Table 1. Appendix 1 contains comments explaining the reasons for low ratings, a list of any errors found in each data set, and any other pertinent remarks concerning the data. The comments are ordered by data set number.

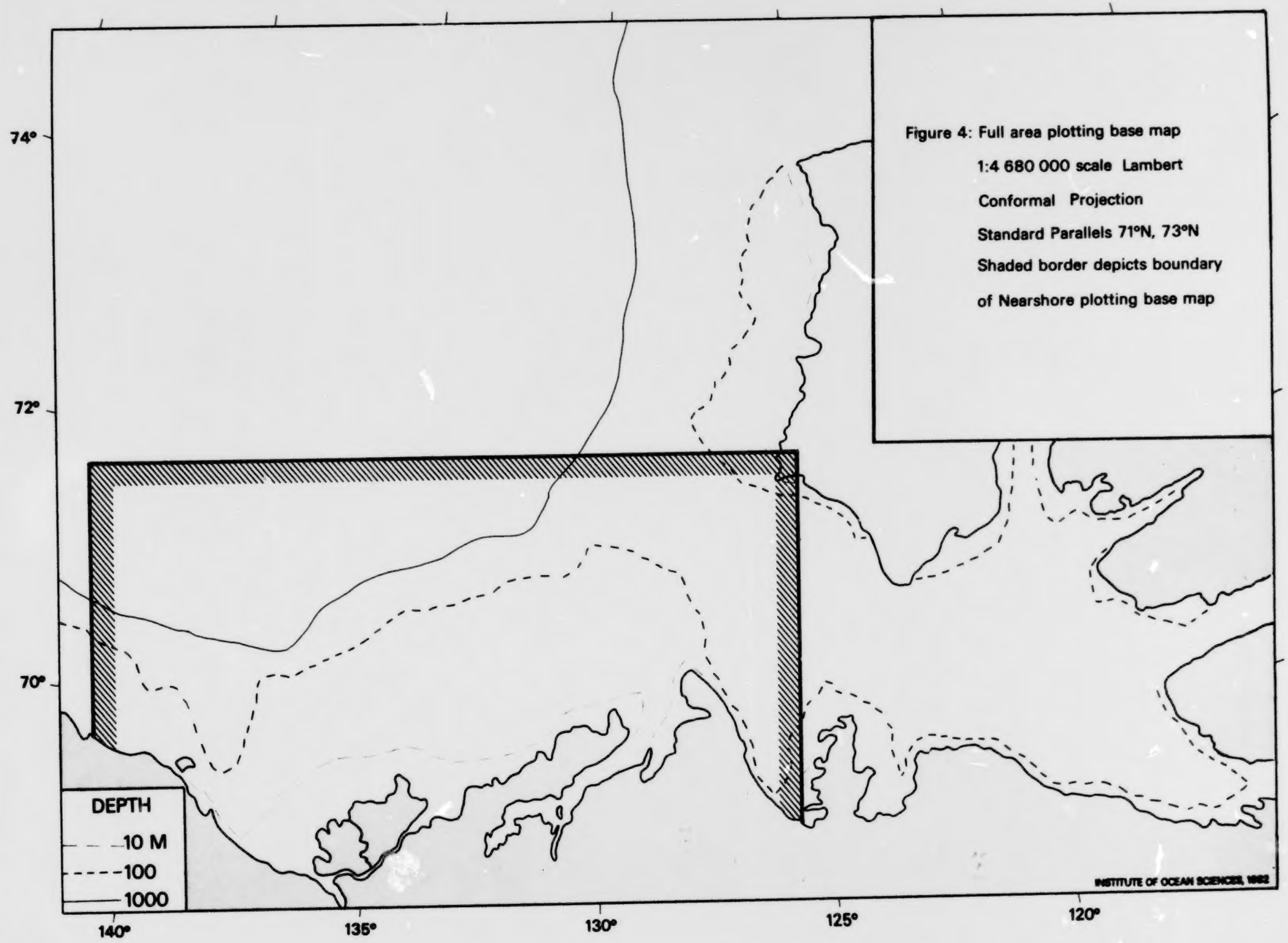
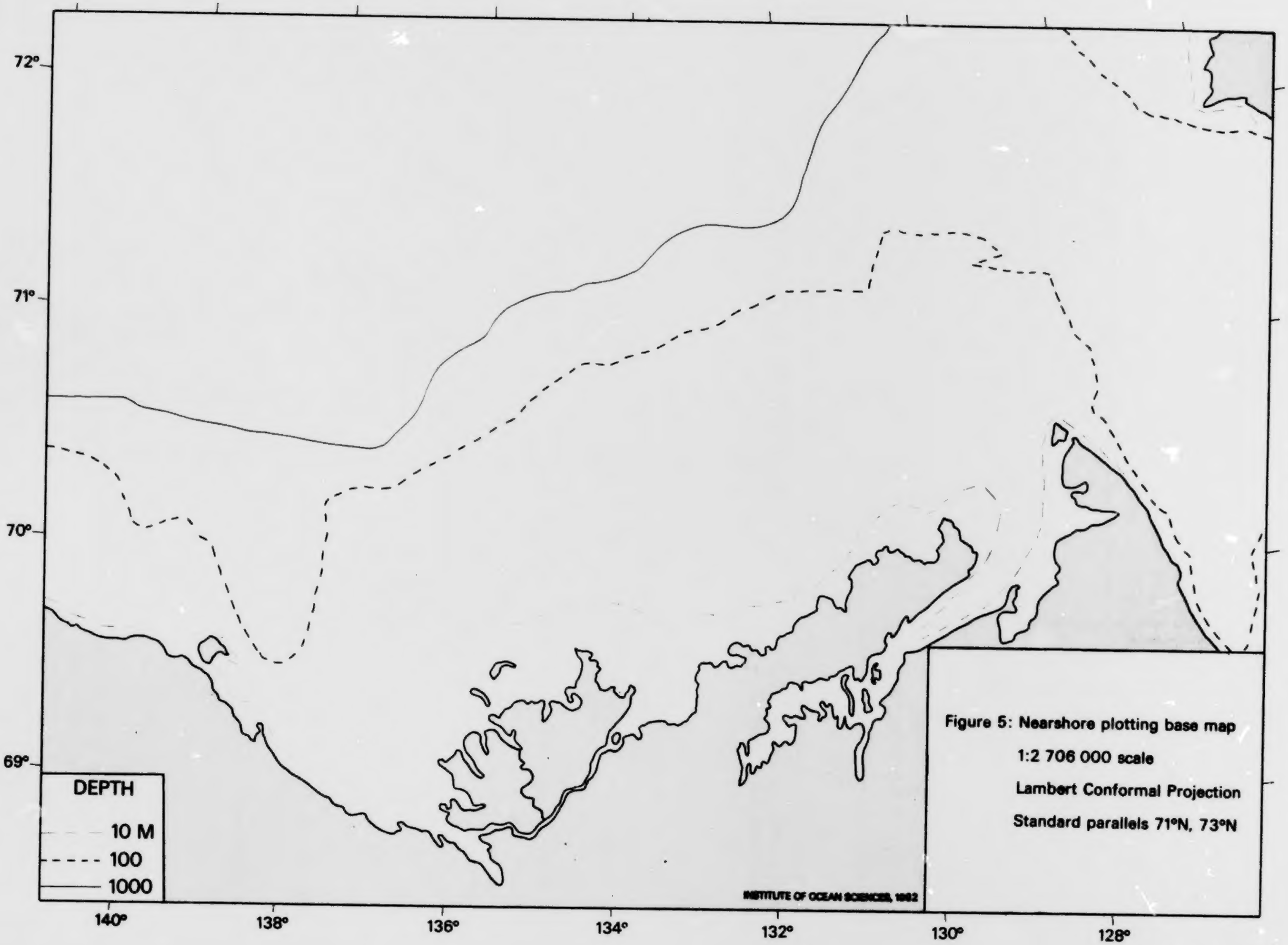


Figure 4: Full area plotting base map
1:4 680 000 scale Lambert
Conformal Projection
Standard Parallels 71°N, 73°N
Shaded border depicts boundary
of Nearshore plotting base map



INSTITUTE OF OCEAN SCIENCES, 1982

Figure 5: Nearshore plotting base map
1:2 706 000 scale
Lambert Conformal Projection
Standard parallels 71°N, 73°N

Section 6 contains a general description of the extent of the data available in the Beaufort Sea. Sections 6.1 and 6.2 describe its geographical and seasonal distribution. Section 6.3 tabulates instances of repeated measurements in the same area, and instances where measurements were carried out simultaneously, but in different areas.

4.3 SAMPLE USE OF THE INVENTORY

A typical use of the inventory might go as follows:

1. Consult the indexes in Section 10 to determine which data sets contain appropriate measurements in the desired areas.

2. Consult the maps in Section 9 to determine the number and disposition of measurements.

3. Refer to Table 1 for an overall description of each data set including the dates spanning the measurement period and an abbreviated listing of sources for the data.

4. If more specific information is required concerning the timing or location of individual measurements in the set, refer to Section 11.

5. Refer to Table 1 and Appendix 1 for information concerning the instruments and methods used in collecting the data, estimates of its accuracy and its overall rating.

6. Consult the reference index in Section 10 for partial listings of works referring to or using the data.

Another example might go as follows:

1. Examine the maps in Section 9 for measurements during a particular year, and note the data set numbers of interest.

2. Refer to Table 1 to find the range of measurement dates, measurement methods and accuracies and data sources.

3. Continue with steps 4, 5 and 6 from the first example

5. DATA RATING AND APPRAISAL

5.1 TYPES OF DATA

5.1.1 BOTTLE CAST DATA

These data consist of temperature and salinity measurements at discrete depths (ideally the international standard depths) by means of reversing thermometers and sampling bottles. Temperature accuracies of $0.01C^{o}$ may be achieved by averaging 2 or more carefully read, well-calibrated thermometers. Until the 1960's, salinity was obtained by titrating the water samples drawn from the bottles; replicate titrations in the hands of a good operator could yield results precise to 0.01°/oo. In the 1960's, salinometers measuring salinity via the conductivity of the sample replaced titrations. A precision of 0.003°/oo can be obtained with the better instruments, although in the past, systematic errors of up to 0.02°/oo could be introduced by variations in the standard water used to calibrate these instruments. New international standards for salinity (Lewis, 1978) now available (1982) should eliminate the latter source of error.

5.1.2 CTD DATA

In this inventory CTD data include any data produced by in situ profiling instruments variously called STD (salinity-temperature-depth), STP (salinity-temperature-pressure), CTD (conductivity-temperature-depth) or CTP (conductivity-temperature-pressure) profilers. Fundamentally, all are CTP devices, the variations in output and name depending solely upon the degree of internal data processing they perform. All of them perform the same basic function of measuring (more or less continuously) temperature and conductivity as a function of depth. The precision achievable with such devices depends upon the individual instrument. The best (e.g. Guildline 8705 or 8706) are capable of a precision of 0.005°C and 0.005°/oo, although accuracy in salinity, until recently, was limited to approximately ±0.02°/oo because of inconsistencies in salinity standards and definitions. The latter defect should be remedied by the new standards currently coming into effect.

5.1.3 BATHYTHERMOGRAPH

The bathythermograph (BT) is a thermo-mechanical device which measures water temperature as a function of depth. Its information is produced as a trace on a smoked glass slide which can be read if well calibrated to an accuracy of ±0.2°C and ±2 m depth. The BT was widely used in conjunction with reversing thermometers before the advent of the CTD, but has now largely been superseded. The existence of sets of BT data has been noted in this report, but the casts have not been catalogued in detail (See Section 8).

5.1.4 SELF-RECORDING CURRENT METERS

By the 1970's oceanographers could practically and reliably place and recover self-recording current meters in the water column. In the Arctic, for example, meters may be moored from the sea floor, or hung beneath the ice surface. Meters of this type generally record internally on magnetic tape (in some older models photographic film or paper charts were used) or, rarely, telemeter data to a ship- or shore-receiving station. They generally provide time series of current speed and direction, and may have other sensors (such as temperature, pressure or conductivity) mounted as well. Current speed and direction are usually measured by one of two methods: either by a propellor or rotor with a vane for direction sensing, or by measuring two orthogonal components of the current speed. Orthogonally-mounted propellors, electromagnetic or acoustic sensors all measure component speeds. In all cases a magnetic compass or a torsionally rigid mooring oriented at the surface provide directional reference. The Aanderaa and Hydroproducts meters are commonly-used instruments employing the propellor and vane system. The Cushing and Marsh-McBirney (electromagnetic), the Neil Brown (acoustic) and the Davis-Weller (orthogonal propellors) instruments use the component system.

The accuracy of a current meter depends both on the instrument design, and on the environment in which it is used. Serious problems are encountered if rotor-type meters are used in the wave zone. Calibrations may drift and sensors foul with electromagnetic and acoustic meters. The accuracy of the record also depends on the sampling frequency and integration period selected for the meter.

In the Canadian Arctic special problems in direction measurement are encountered when using any type of current meter because of the proximity of the magnetic pole. Directional accuracies are generally degraded unless the current meter is oriented by rigid moorings to a fixed surface.

5.1.5 PROFILING CURRENT METERS

These current meters provide a series of point measurements of current speed and direction at several depths throughout the water column. Meters used for this purpose are generally of the propellor or rotor and vane design, such as the Endeco. Measurements usually are taken through the ice, or from an anchored ship in shallow water. In water too deep for anchoring a very good positioning system is required to correct for ship movements. The directional precision of the measurements can be degraded by the proximity of the magnetic pole. Unless repeated profiles were taken as a time series, data of this type were not generally catalogued in this inventory. (See Section 8.)

5.1.6 SATELLITE-TRACKED DRIFTERS

Satellite-tracked drifters date from the mid 1970's. Widespread use of these devices began after the launch of the Nimbus VI satellite carrying the Random Access Measurement System (RAMS) in 1975. In early 1979, the TIROS-N satellite was launched activating Systeme ARGOS, now used to track all such devices.

Both RAMS and Systeme ARGOS compute position from the Doppler shift of a signal transmitted from the buoy to the satellite. On each pass of the satellite the signal is received and sent to a ground facility where the data are processed to produce positions and other measured parameters. The RAMS system produced positional accuracies of approximately ±2 km. Prior to summer 1978, RAMS produced an average of 8 valid fixes per day in northern latitudes. During the remainder of 1978, the number of fixes per day declined to 4 and then to 2 by the end of the year. The ARGOS system has an average positional accuracy of ±1.2 km, and produces an average of 10 valid position fixes per day in northern latitudes.

5.1.7 RADAR OR AIRCRAFT-TRACKED DRIFTERS

This type of drifter usually consists of a float (with or without a drogue) and a radar reflector or visual marker. These devices can be tracked visually or by radar from shore or from a ship or aircraft. The accuracies achievable depend upon the tracking system used, and can be very good if a sophisticated system is available. Data of this type are often limited in their coverage in space and time, and may have gaps resulting from bad weather.

5.1.8 WATER LEVEL GAUGES

Water level data are produced by bottom-mounted pressure gauges or mechanical, shore-mounted float-type gauges. The bottom pressure gauges may be self-contained, or they may consist of a pressure sensor connected to a shore-mounted recording device. The mechanical gauges (usually used at the permanent gauge locations) record by pen on chart paper. The data are usually digitized at hourly intervals, providing a record with a precision of approximately ±1 cm, and an accuracy of the order of ±5 to 10 cm. The precision of the bottom pressure gauges varies from a millimetre to a centimetre, depending upon the instrument type and range. Sampling intervals generally vary between 5 and 60 minutes. Unless corrections are made, bottom-pressure records will also contain signals caused by variations in atmospheric pressure.

5.2 DATA RATING SCALE

5.2.1 RATING CRITERIA

The data appraisal in this inventory is intended to provide the reader with an indication of the utility of each data set and its suitability for comparison with other data sets. The appraisal considered, first, documentation (e.g. data reports) describing the methods used in collecting and processing the data and the investigator's estimate of its precision, accuracy and utility. Assessments made in any subsequent analysis of the data were also taken into account where they were available, i.e. if errors were found in a particular data set during a subsequent analysis, and the results were published, they were used in the assessment. We also checked a limited number of actual data sets (bottle cast data available from the Marine Environmental Data Service (MEDS)) using the criteria and methods described in Section 5.3. Table 1 identifies the sets which were so tested (see the introduction to the Table in Section 8 for the key to the symbols used).

The information from the sources above was combined to assign a numerical rating to each set. The rating system has five levels, briefly defined as follows:

0: data are found to be wrong.

1: data suspect because of ill-defined doubts.

2: insufficient information, was not or could not be investigated.

3: data are internally consistent - patterns or trends within data probably real but comparison with other data sets may pose problems.

4: data are internally consistent and exhibit sufficient standardization that comparison with other 4 rated data should be possible.

5.2.2 ASSIGNMENT OF RATINGS

0 RATING

A data set received a zero rating if any of the sources above revealed serious deficiencies in technique, or significant systematic errors. A zero rating was also assigned if the documentation of the data set was inadequate (e.g. if the positions and times of measurements were not given) and if it seemed likely that the information had never been recorded. Future discoveries of missing information would allow upgrading of the rating in those cases.

1 RATING

A data set received a 1 rating if, either as part of a data report or in subsequent analysis and examination the original or other investigators questioned the validity of the data without pinpointing specific errors. In general, a "1" rating was assigned if a data set exhibited an atypical distribution of values, or indicated unlikely physical processes, but contained no obvious errors. Such data sets require careful examination before use.

2 RATING

Ratings of 2 were given to data sets for which it was not possible to carry out an appraisal. Such cases include:

(i) Proprietary data, whose existence is known, but about which no details are available.

(ii) Data sets for which we were unable to obtain documentation, but were not certain that the documentation did not exist (usually data from a central data bank or another catalogue).

3 RATING

Data received a 3 rating if it was internally consistent within the precision of the methods used to collect the data. Precision measures the degree of random fluctuation experienced when a measurement is repeated many times, while accuracy measures the departure of the measurement (or the mean of a series made under controlled conditions) from the true value. Because oceanographic data is normally taken without replication and under uncontrolled conditions, data taken with instruments of a certain precision will have the same (or poorer) level of accuracy. The only likely exception is the case of a series of temperature-salinity measurements taken within a water body of stable, well-defined characteristics, in which case the mean of the measurement series could provide a measurement more accurate than the precision.

Ratings of 3 were given to all data sets for which no evidence of errors beyond the precision given in Table 1 was found, but which were not measured with the highest precision and accuracy attainable with the present-day instruments described in Section 5.1. If a small number of isolated errors (e.g. density inversions) was discovered during the tests described in Section 5.3, the rating was not lowered. If more than 1 such error for every 2 casts was found, a lower rating was assigned.

Caution should be exercised when comparing two sets of 3 rated data, as their levels of precision may be quite different. The reader should consult both Table 1 and Appendix 1 for precision and error information.

4 RATING

Data received a rating of 4 if they were measured to the precision available with the modern methods described in Section 5.1, and there was no evidence of systematic or other errors recorded in the documentation.

LISTING OF ERRORS

Appendix 1 lists the reasons ordered by data set number for all assignments of ratings below 2. It also lists any other comments concerning the accuracy and usefulness of data sets which were found during the course of the compilations. All errors found during the data tests described in Section 5.3 are listed there as well.

5.3 BOTTLE CAST DATA TESTS

Bottle cast data available from MEDS (the Marine Environmental Data Service) on computer tape were tested for readily-apparent errors such as density inversions and temperature and salinity values outside of expected ranges. We did not test any other data types. Column 7 of Table 1 indicates which sets were tested. An asterisk beside the rating number means that some errors were detected. A dagger means that the set was checked but no errors were found. No entry means that the set was not checked.

Data points were noted as erroneous if any of the following three conditions were fulfilled:

(i) Density inversions with a difference greater than 0.02 in sigma-t were found.

(ii) Salinities greater than 34.90^{o}/oo were found.

(iii) Temperatures greater than 0.5^{o}C at depths greater than 300 m were found.

Appendix 1 lists the errors found sequentially by data set number.

6. SUMMARY OF DATA COVERAGE

6.1 SPATIAL COVERAGE, INCLUDING DATA DISTRIBUTION MAPS

The distribution of temperature-salinity (Figure 6) and current meter-water level sampling locations (Figure 7) is not uniform. Much of the available T-S information was collected over the broad continental shelf bordering the Mackenzie Delta and Tuktoyaktuk Peninsula; areas of particularly intensive sampling include Herschel Canyon, Mackenzie Bay, offshore of Richards Island and Kugmallit Bay (including Tuktoyaktuk Harbour). Large quantities of temperature-salinity data are also available for the northwest sector of the Canadian Beaufort Sea. These data, obtained in the AIDJEX programs of 1970, 1971 and 1975-1976, were collected from the permanent pack ice over the deep water of the Arctic Ocean.

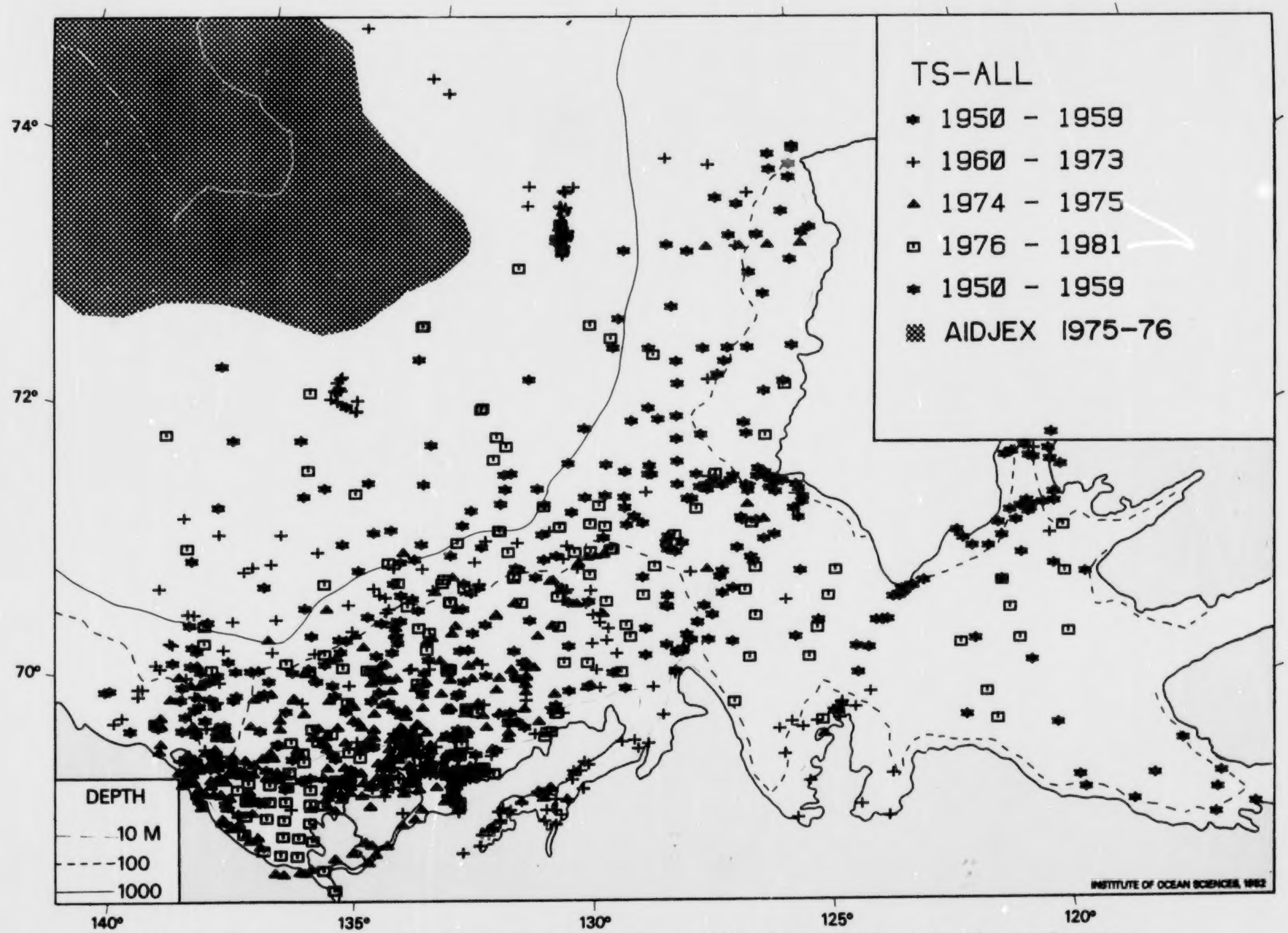


Figure 6(a): The locations of temperature-salinity profile data obtained in the study area.

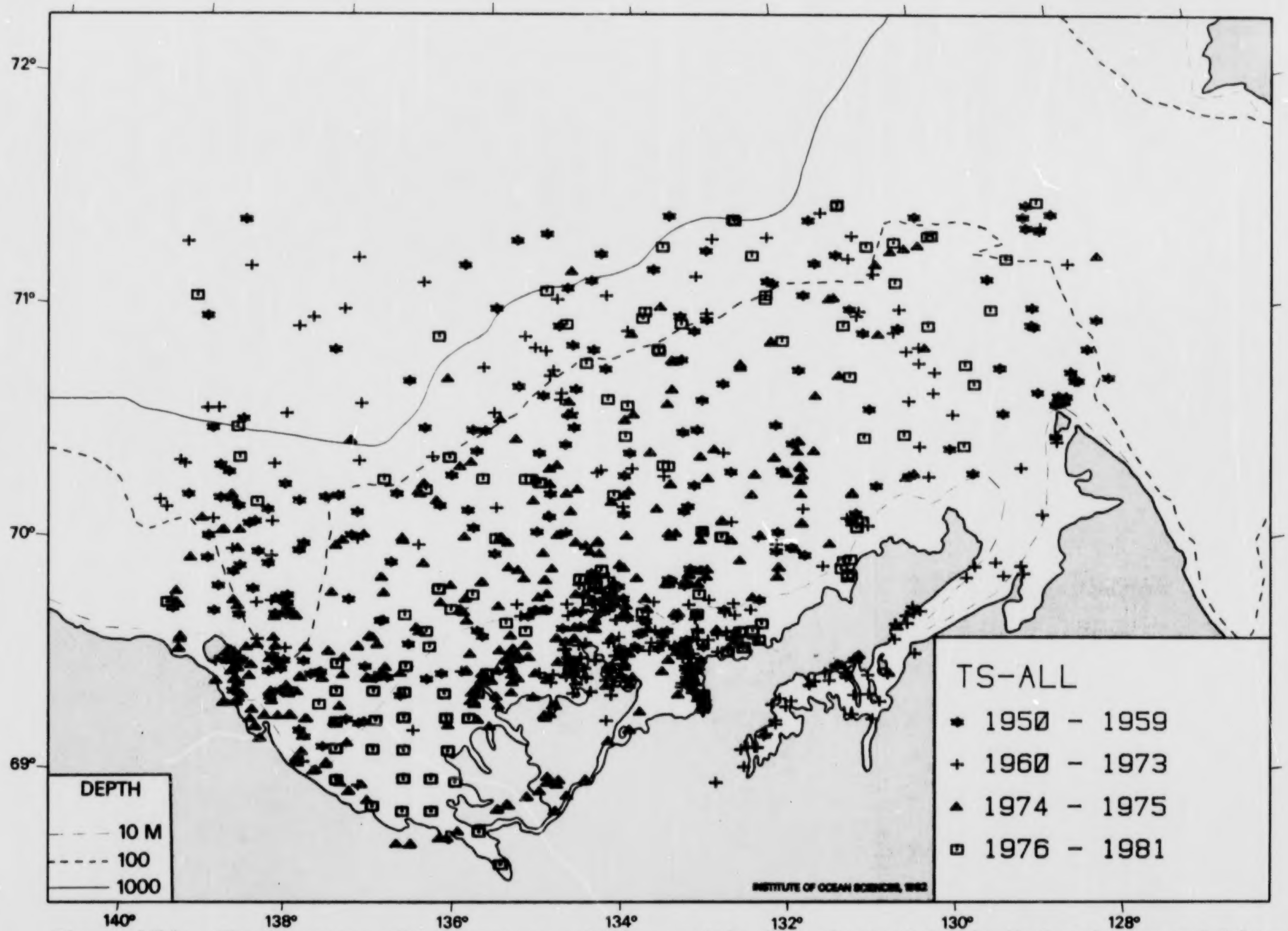


Figure 6(b): The locations of temperature-salinity profile data obtained in the Mackenzie Bay and Tuktoyaktuk continental shelf area.

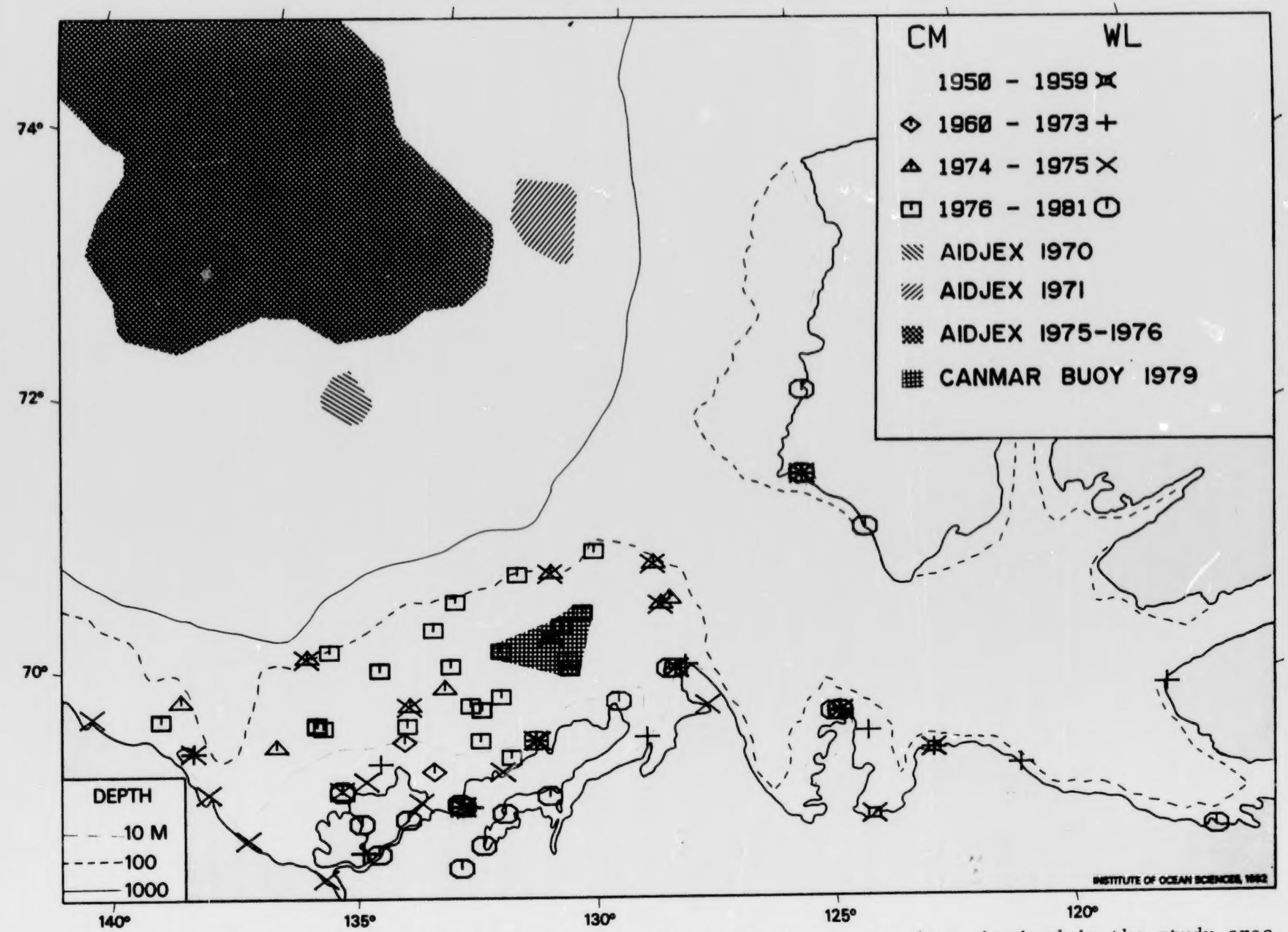


Figure 7(a): The locations of current meter and water level time series data obtained in the study area.

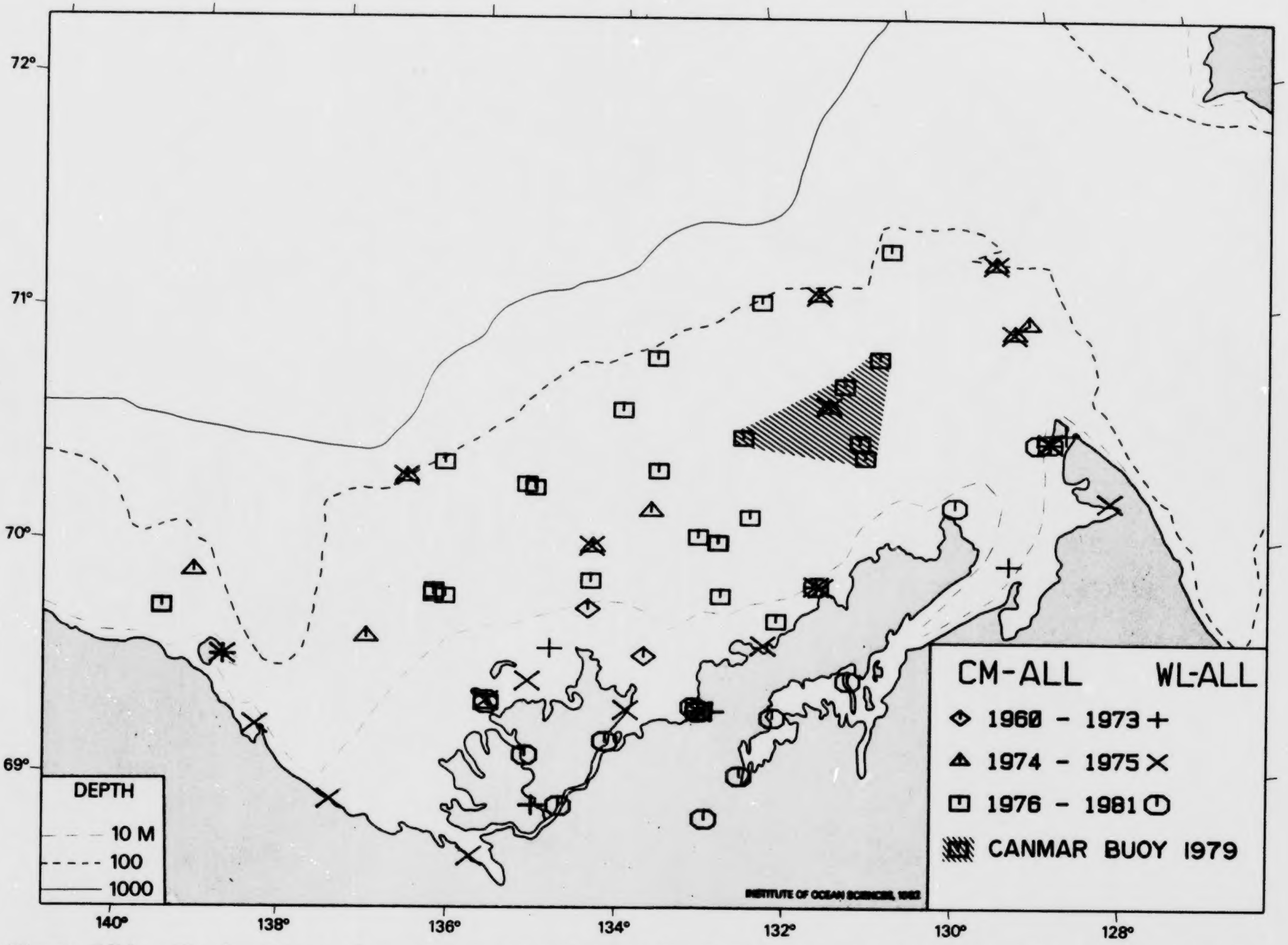


Figure 7(b): The locations of current meter and water level time series data obtained in the Mackenzie Bay and Tuktoyaktuk continental shelf area.

In contrast, few temperature-salinity data are available for Amundsen Gulf and adjacent waters to the south and east, the continental shelf to the west of Banks Island, and the broad zone over the continental rise which separates the continental shelf from the AIDJEX study areas of 1970 and 1975-1976. The central and eastern portions of Amundsen Gulf are particularly lacking in temperature-salinity data; in total, fewer than forty oceanographic stations have been occupied in this vast area (the comparably-sized continental shelf area of Mackenzie Bay and the Tuktoyaktuk Peninsula has temperature-salinity data from more than one thousand stations).

The distribution of current meter data follows the same general pattern as the temperature-salinity data. Areas with no current meter data whatsoever include Amundsen Gulf, the entire continental shelf bordering western Banks Island and the broad zone over the continental rise separating the Tuktoyaktuk continental shelf from the area of the AIDJEX programs.

Water level data have been obtained intermittently at one coastal location, Tuktoyaktuk, since 1961. At two other coastal stations, Cape Parry and Sachs Harbour, data have been collected since 1967 and 1972, respectively. Other than these permanent water level stations, the bulk of the water level data was collected at temporary stations, between 1972 and 1977. The stations were concentrated along the coastline between the U.S.-Canada border and the eastern end of the Tuktoyaktuk Peninsula. A few sets of water level data have been collected at offshore locations on the Tuktoyaktuk continental shelf using bottom-mounted pressure sensors. Very little water level data has been collected in the central and western portions of Amundsen Gulf or along the northern half of the western coastline of Banks Island.

6.2 SEASONAL COVERAGE, INCLUDING BI-MONTHLY MAPS

Bi-monthly location maps (Figures 8 and 9) demonstrate the seasonal and spatial distribution of available temperature-salinity data and current meter-water level data.

TEMPERATURE-SALINITY DATA

The number of salinity and temperature measurements depends on the season in different ways in the various sub-areas of the Beaufort Sea. For example, extensive open water appears during the summer over the continental shelf from Herschel Island to the west coast of Banks Island, and the densest distribution of measurements is found at that time. The sparsest sampling in this area occurs from December to January, when the year's ice is forming and there is little daylight, and from May to June when breakup occurs. A minor peak in available measurements appears from February to April when the ice is used as a measurement platform. In favourable years, the spring measurement season may be longer - using aircraft some data have been collected in the area in December. Spring measurements are rare in areas where the ice cover is unstable such as the transition zone between the landfast and permanent pack ice off the Tuktoyaktuk Peninsula or in the western end of Amundsen Gulf.

In central and eastern Amundsen Gulf, temperature-salinity data are limited to the months of July to October, inclusive.

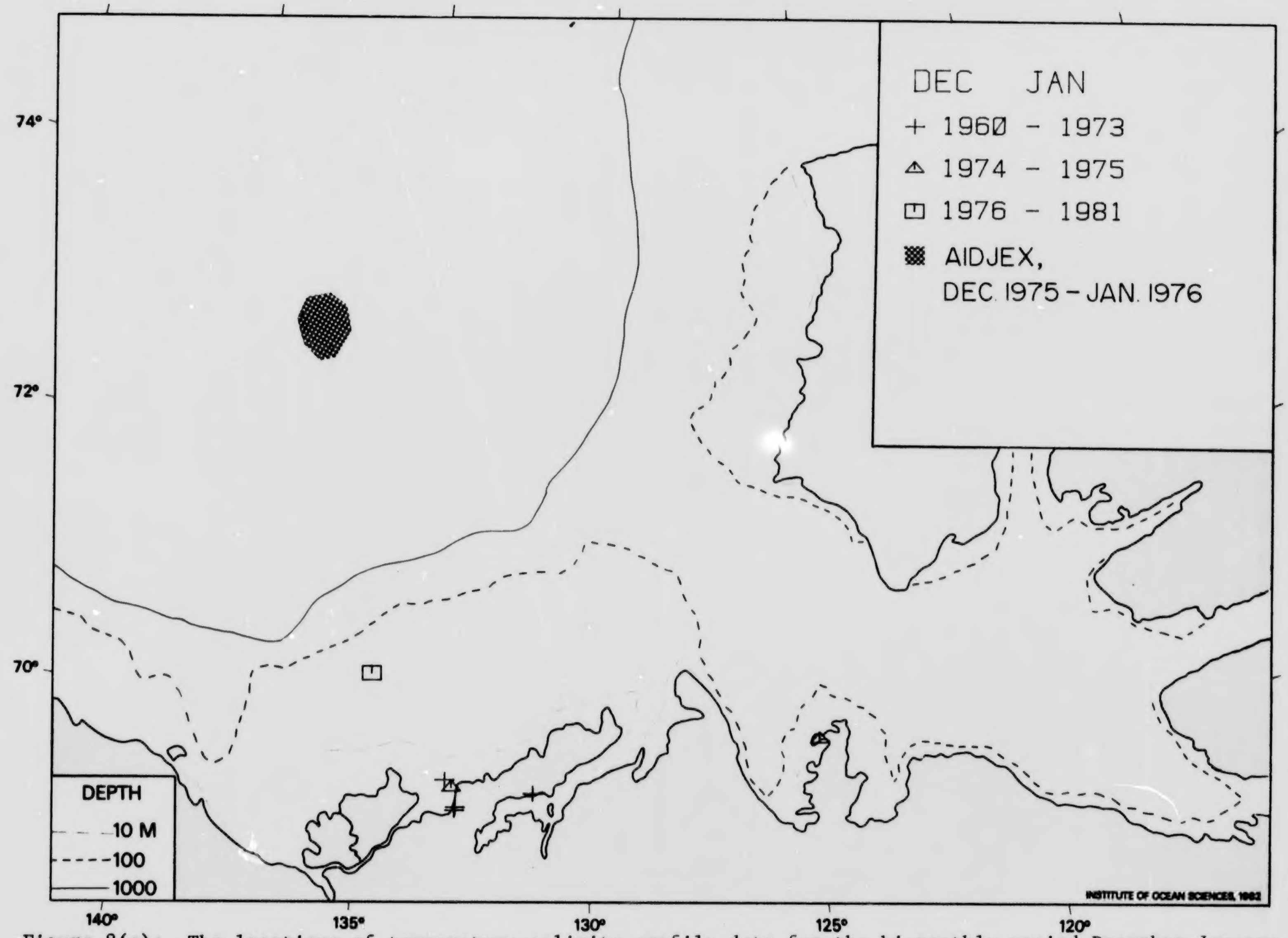


Figure 8(a): The locations of temperature-salinity profile data for the bi-monthly period December-January.

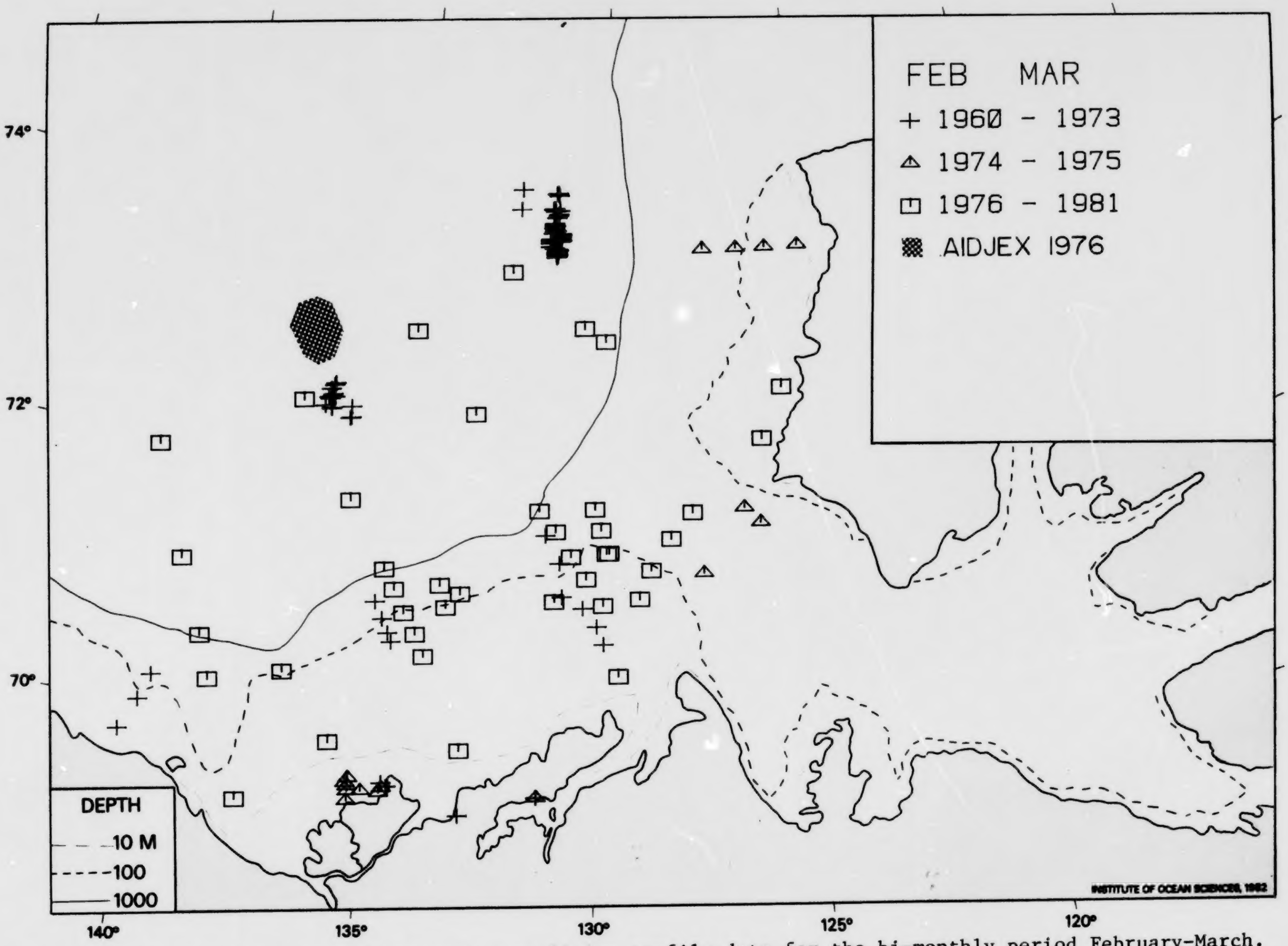


Figure 8(b): The locations of temperature-salinity profile data for the bi-monthly period February-March.

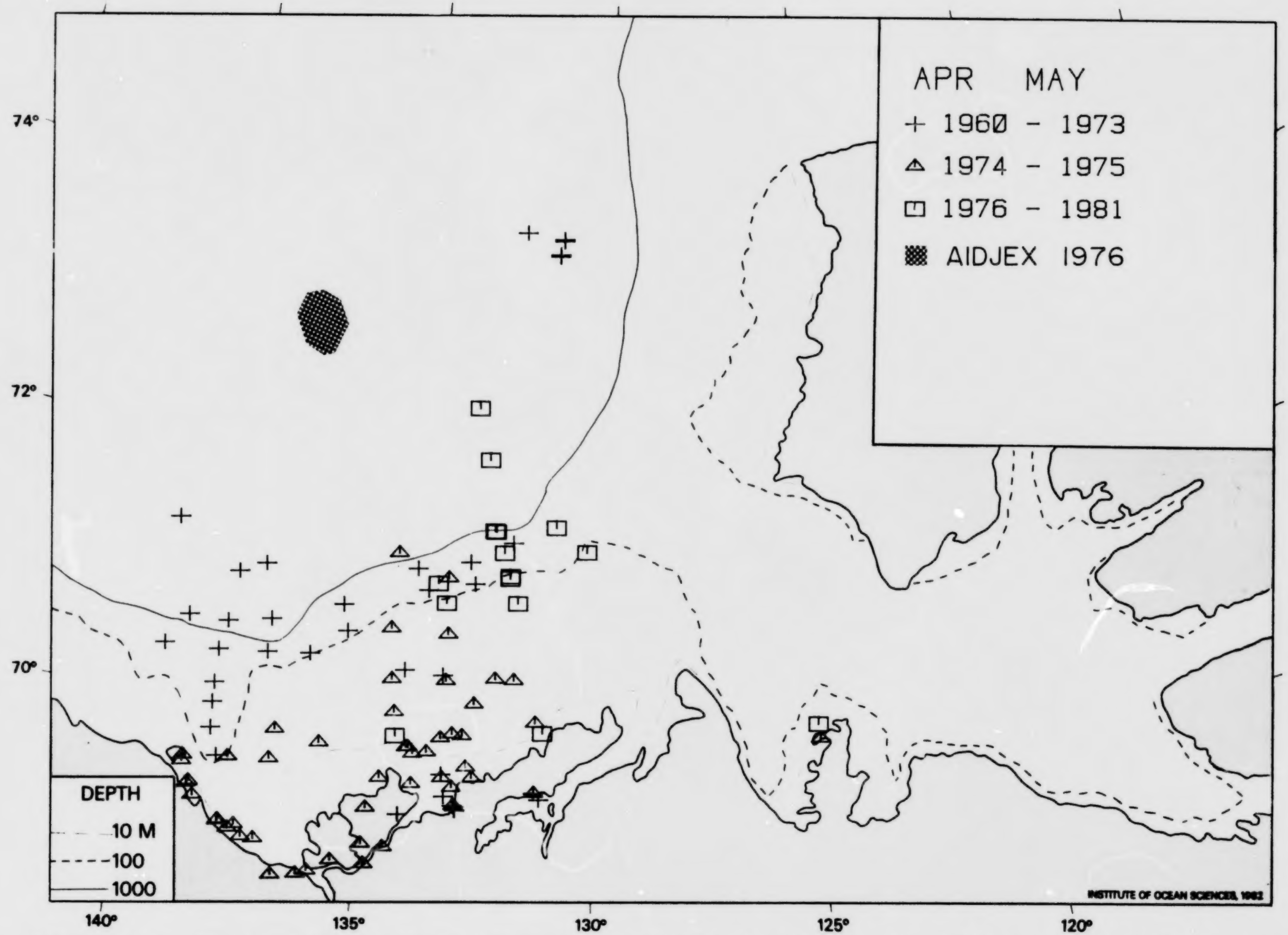


Figure 8(c): The locations of temperature-salinity profile data for the bi-monthly period April-May.

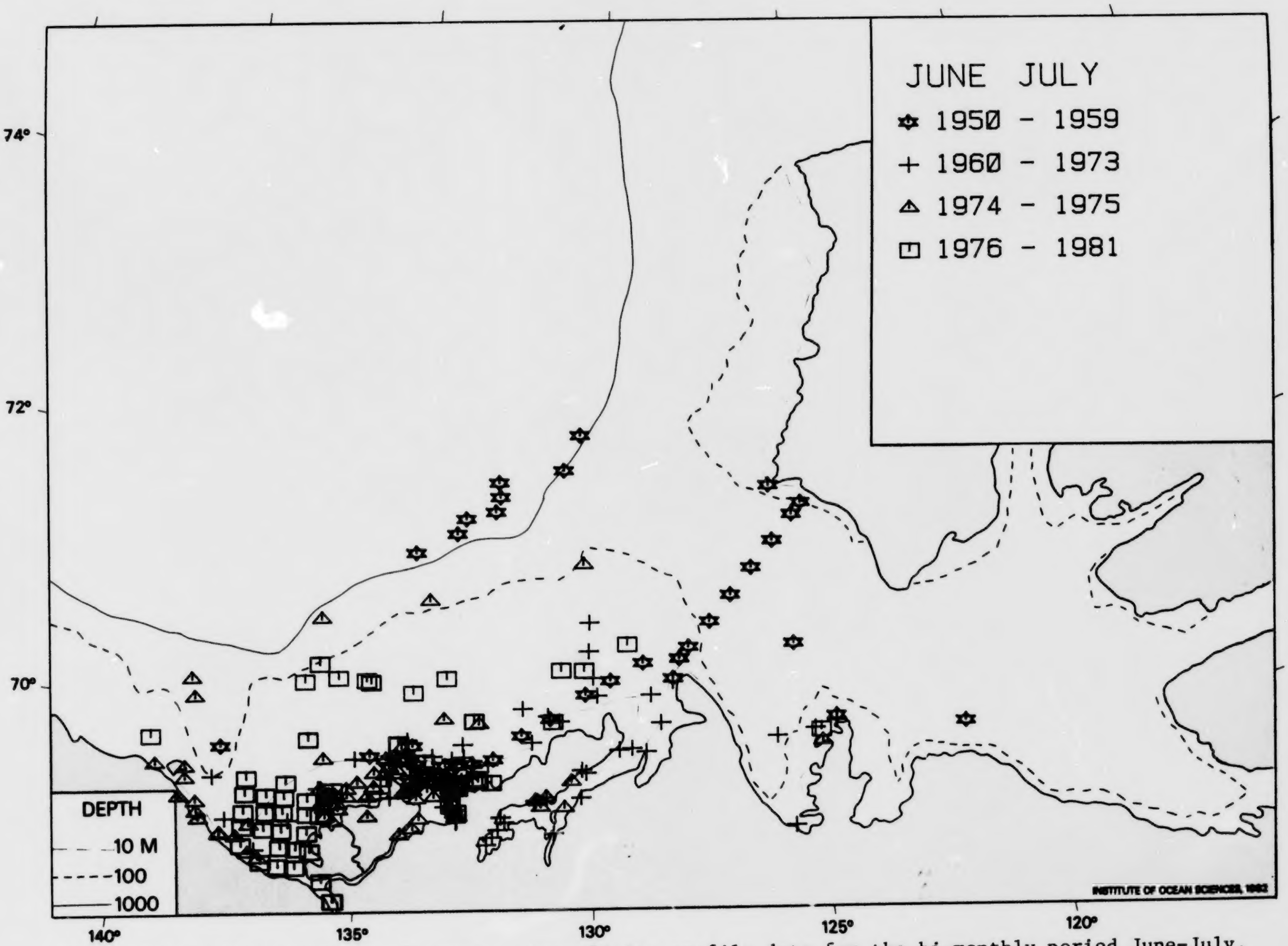


Figure 8(d): The locations of temperature-salinity profile data for the bi-monthly period June-July.

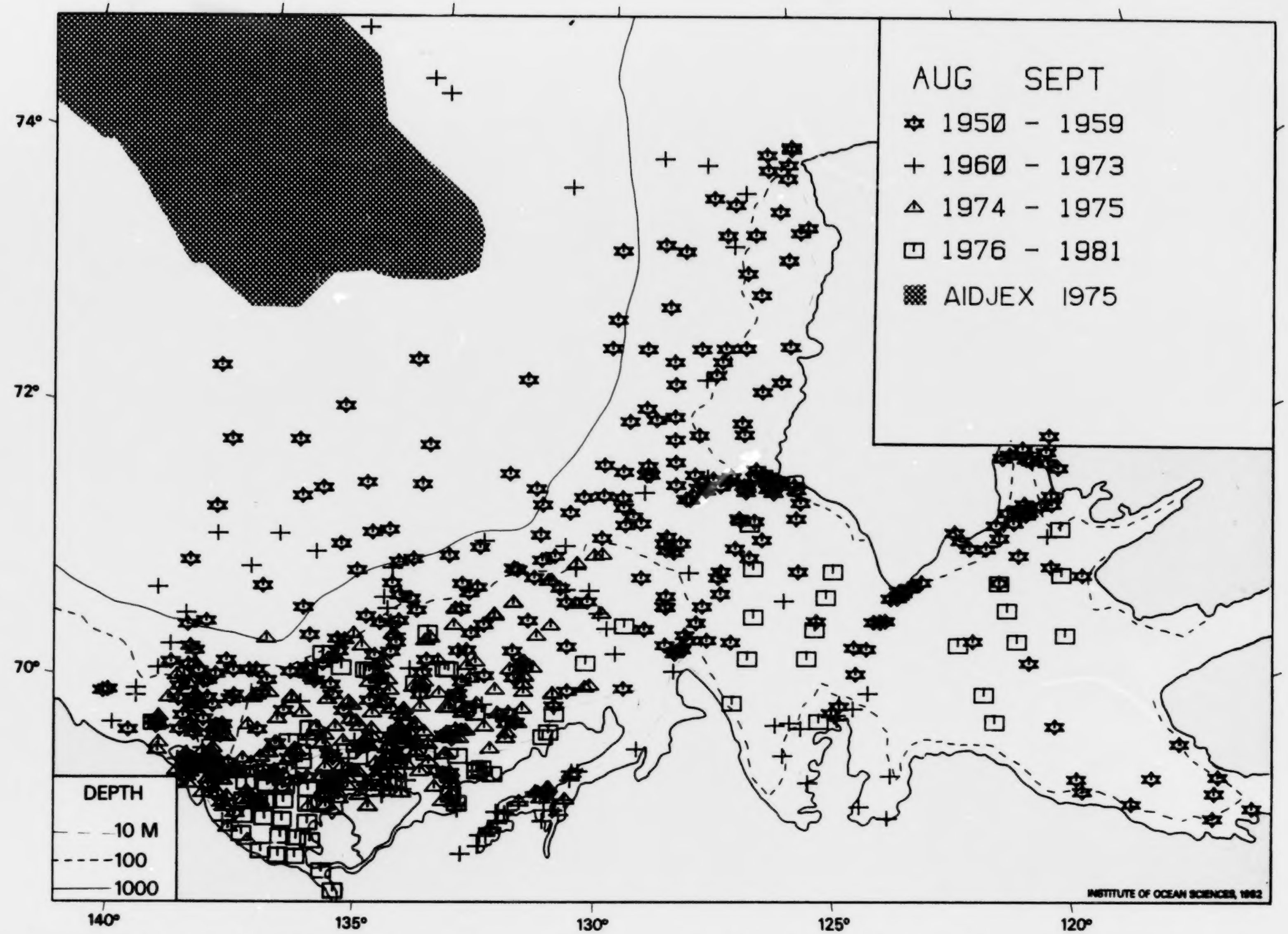


Figure 8(e): The locations of temperature-salinity profile data for the bi-monthly period August-September.

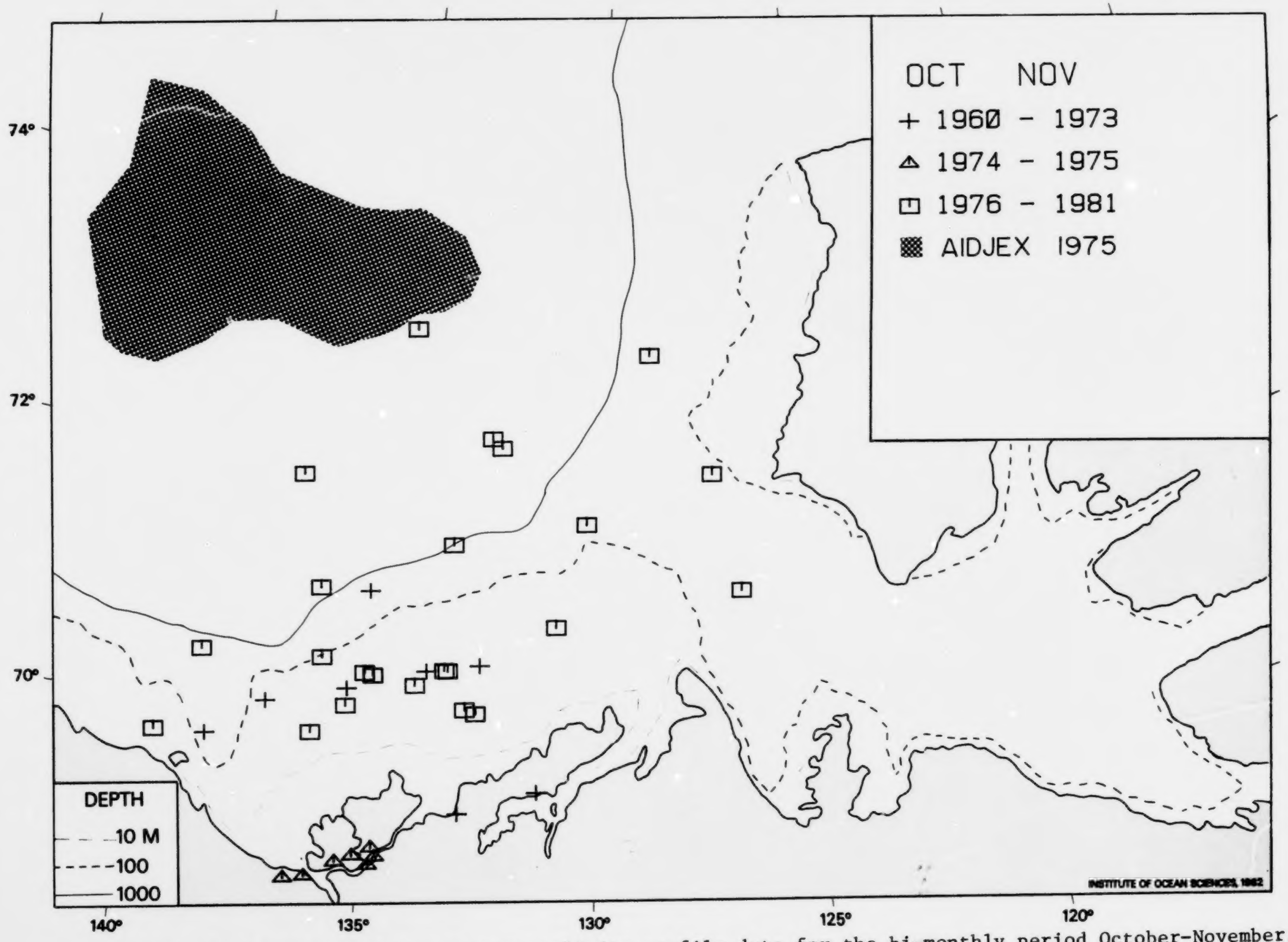


Figure 8(f): The locations of temperature-salinity profile data for the bi-monthly period October-November.

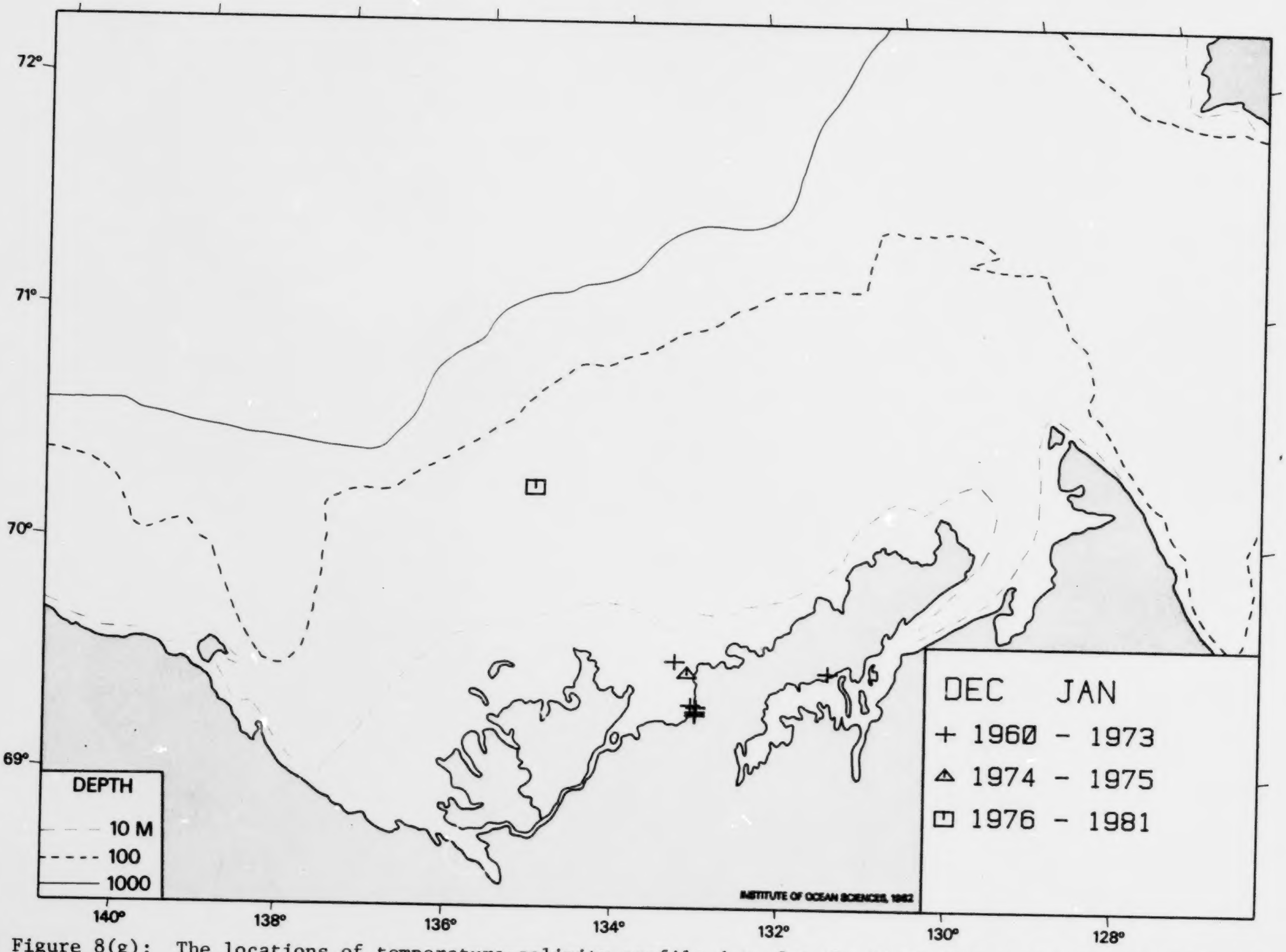


Figure 8(g): The locations of temperature-salinity profile data for the bi-monthly period December-January obtained in the Mackenzie Bay and

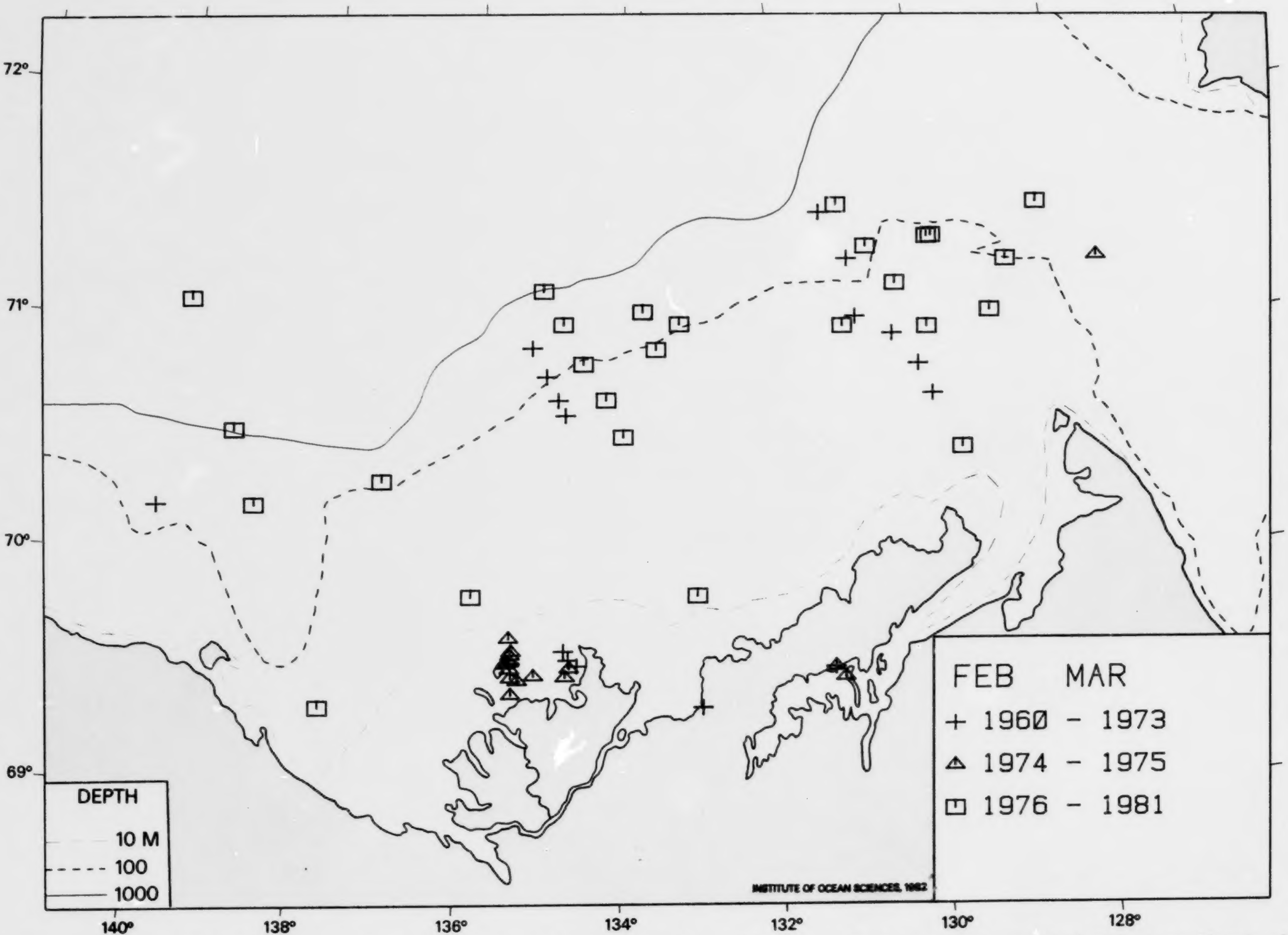


Figure 8(h): The locations of temperature-salinity profile data for the bi-monthly period February-March obtained in the Mackenzie Bay and Tuktoyaktuk shelf area.

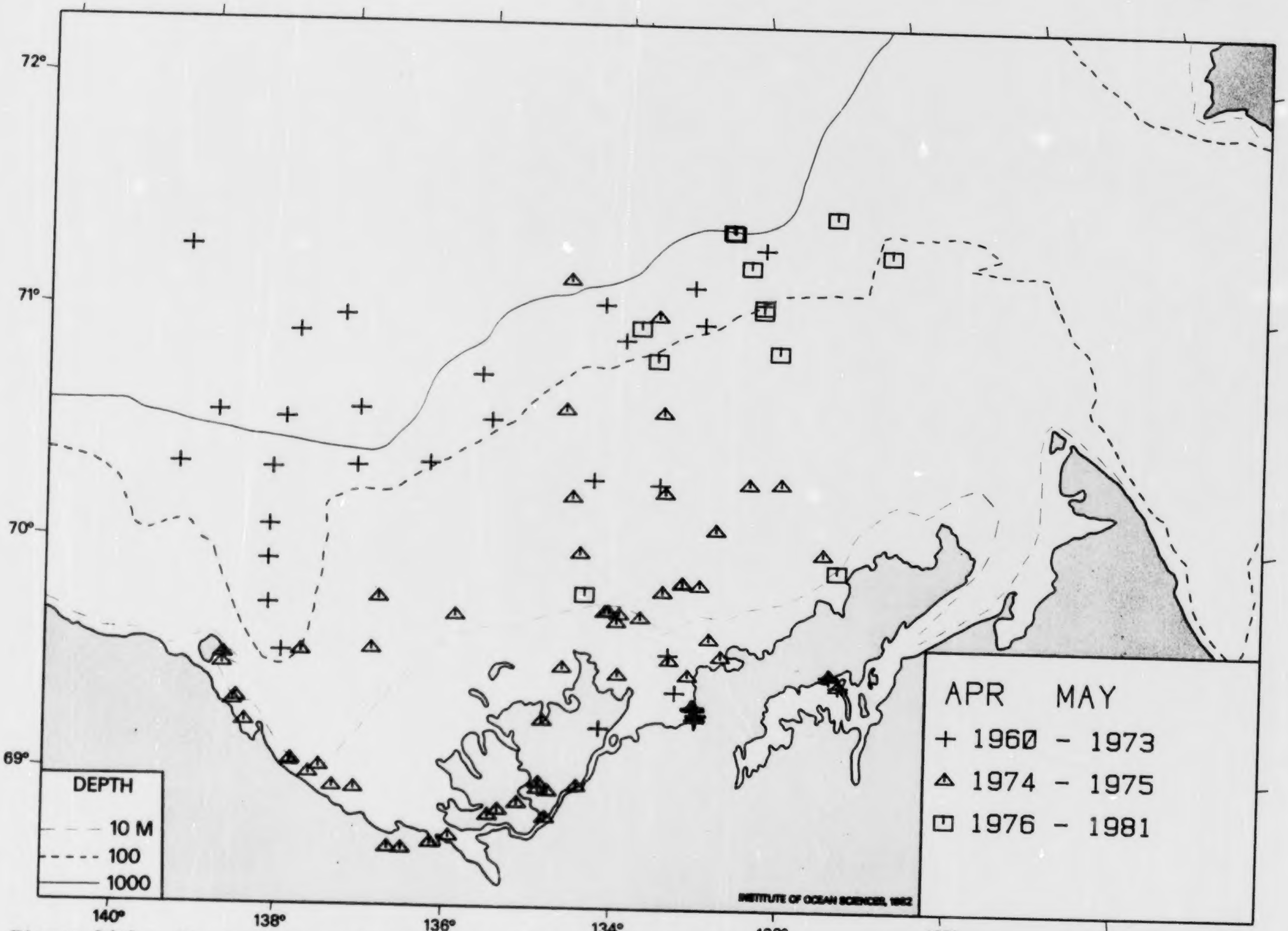


Figure 8(i): The locations of temperature-salinity profile data for the bi-monthly period April-May obtained in the Mackenzie Bay and Tuktoyaktuk shelf area.

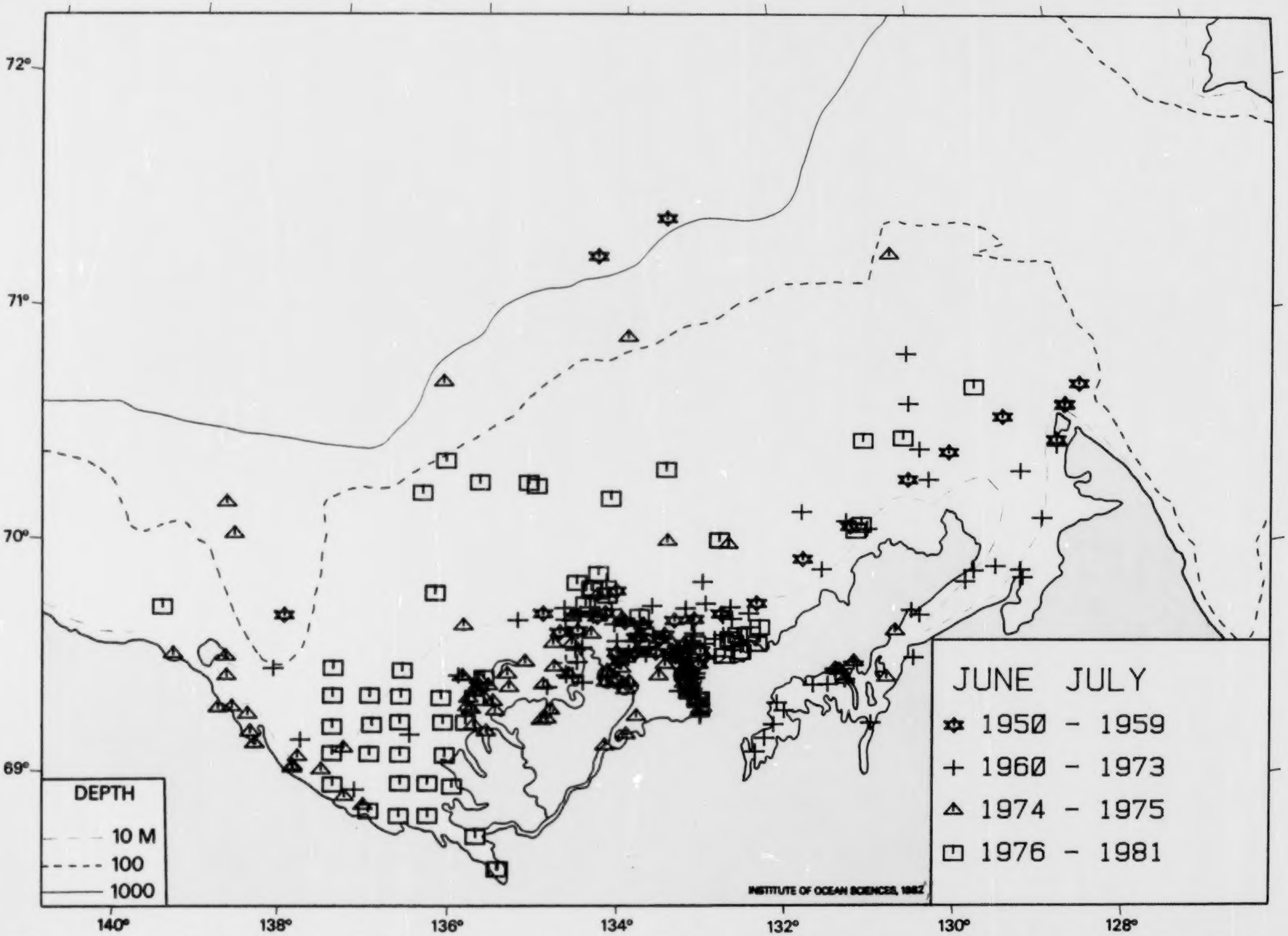


Figure 8(j): The locations of temperature-salinity profile data for the bi-monthly period June-July obtained in the Mackenzie Bay and Tuktoyaktuk shelf area.

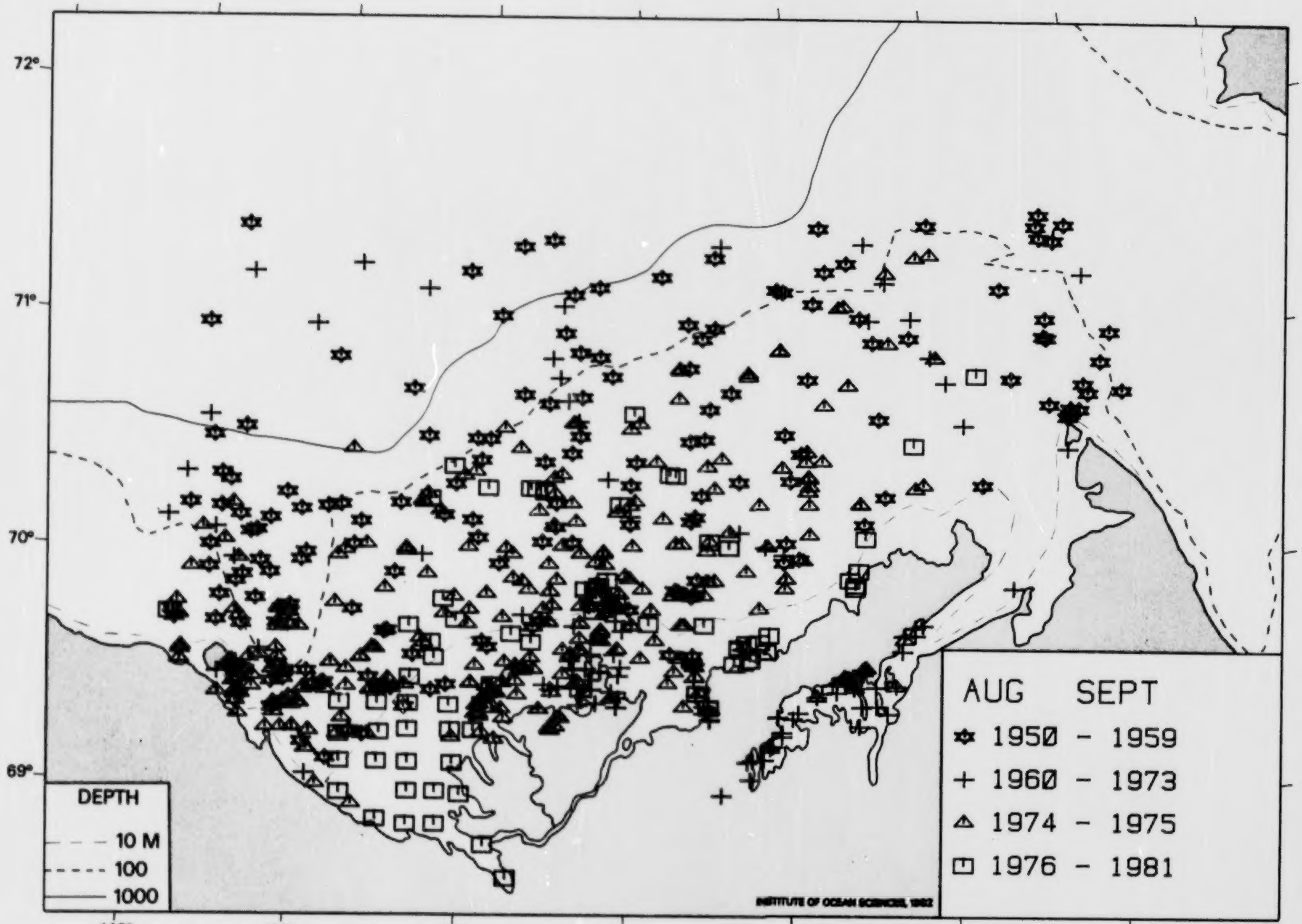


Figure 8(k): The locations of temperature-salinity profile data for the bi-monthly period August-September obtained in the Mackenzie Bay and Tuktoyaktuk shelf area.

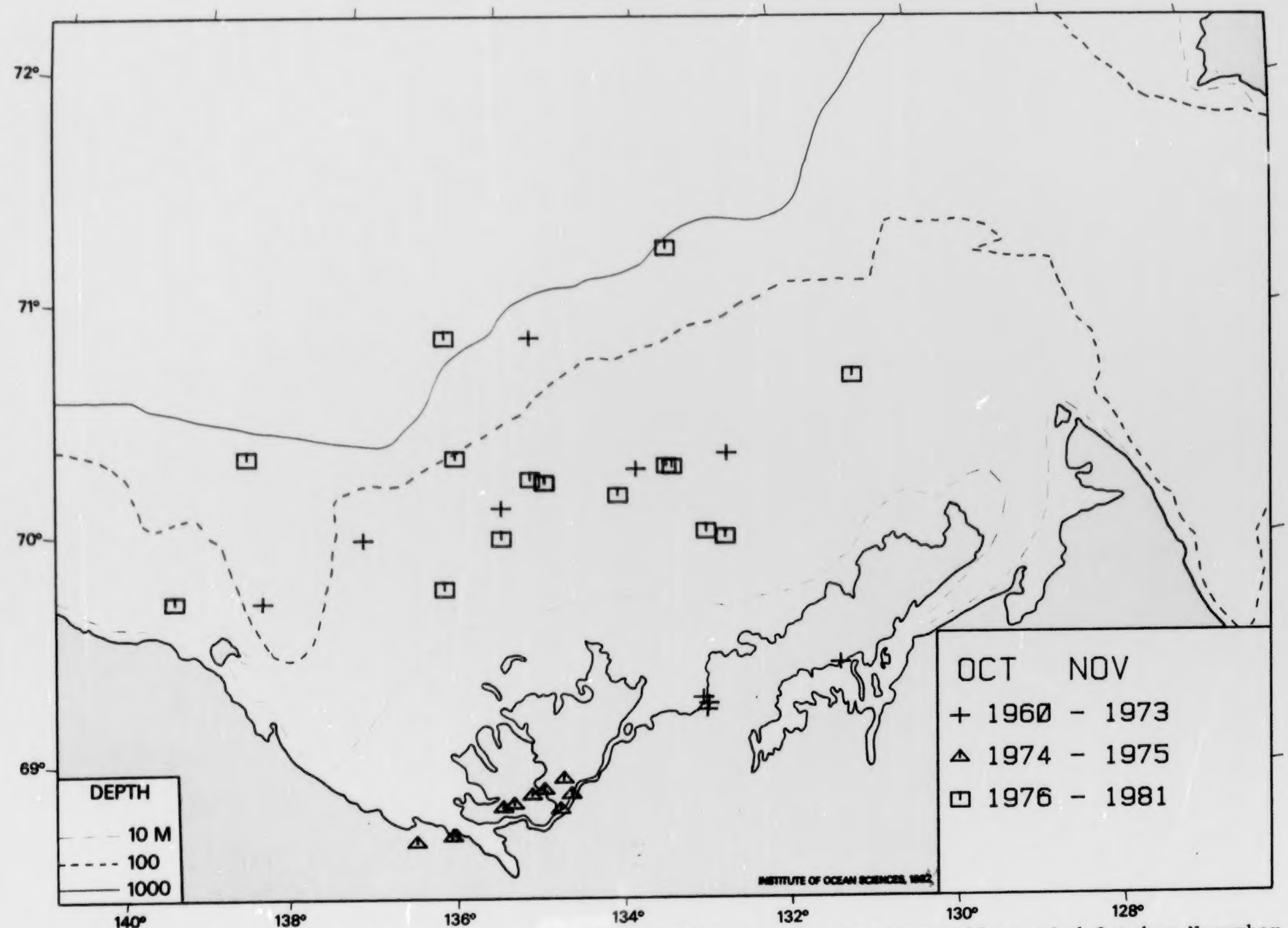


Figure 8(1): The locations of temperature-salinity profile data for the bi-monthly period October-November obtained in the Mackenzie Bay and Tuktoyaktuk shelf area.

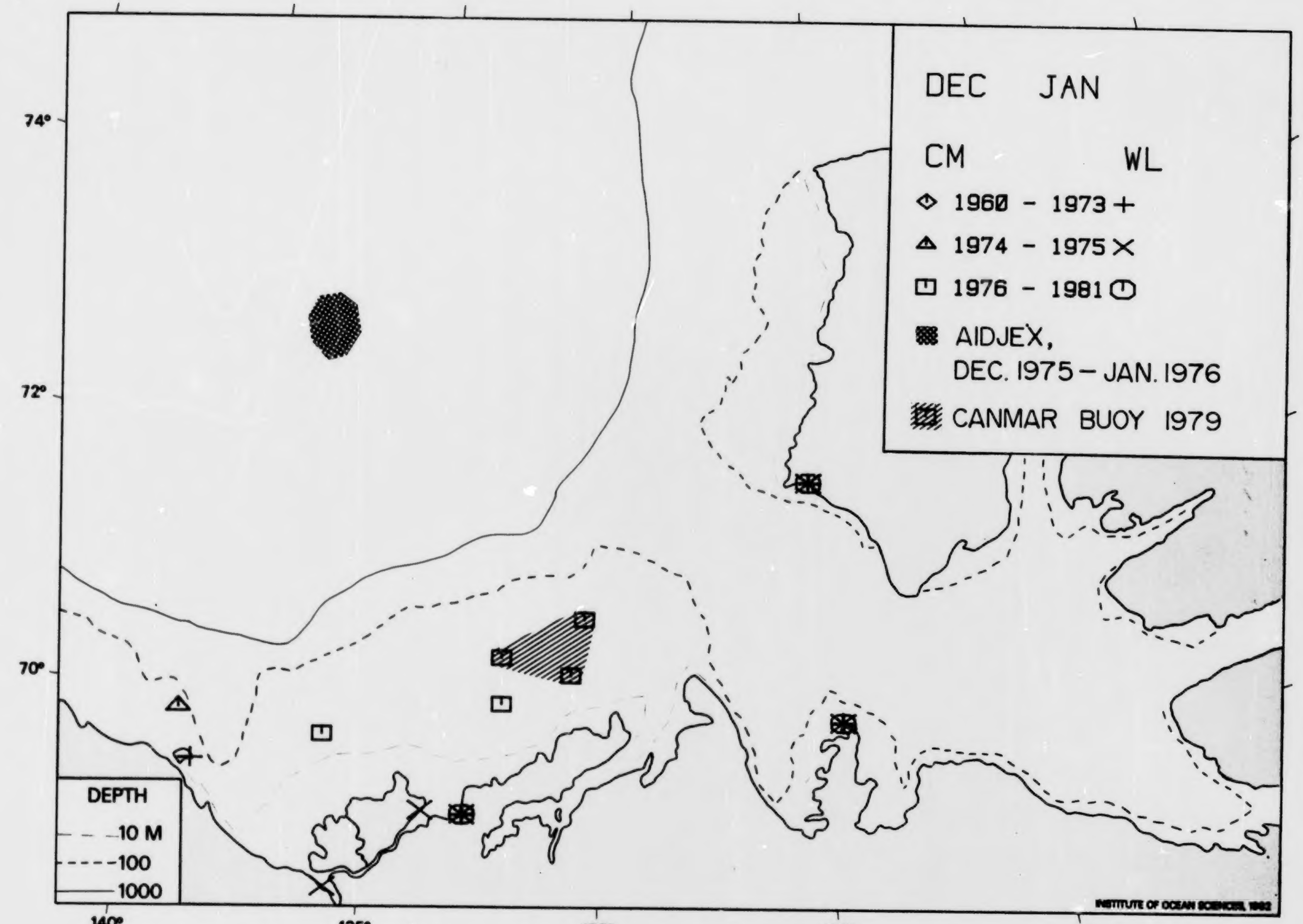


Figure 9(a): The locations of current meter and water level time series data for the bi-monthly period December–January.

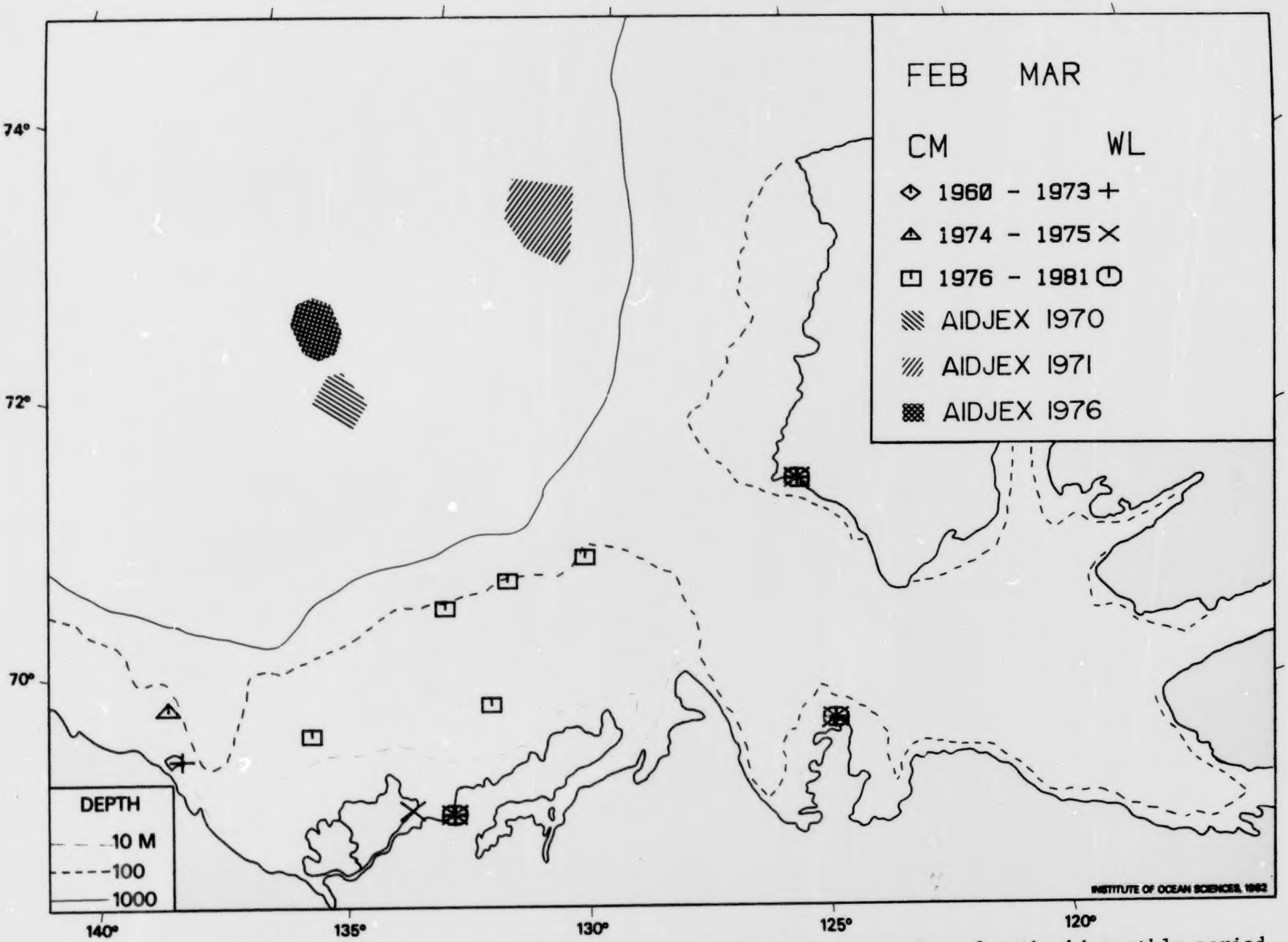


Figure 9(b): The locations of current meter and water level time series data for the bi-monthly period February–March.

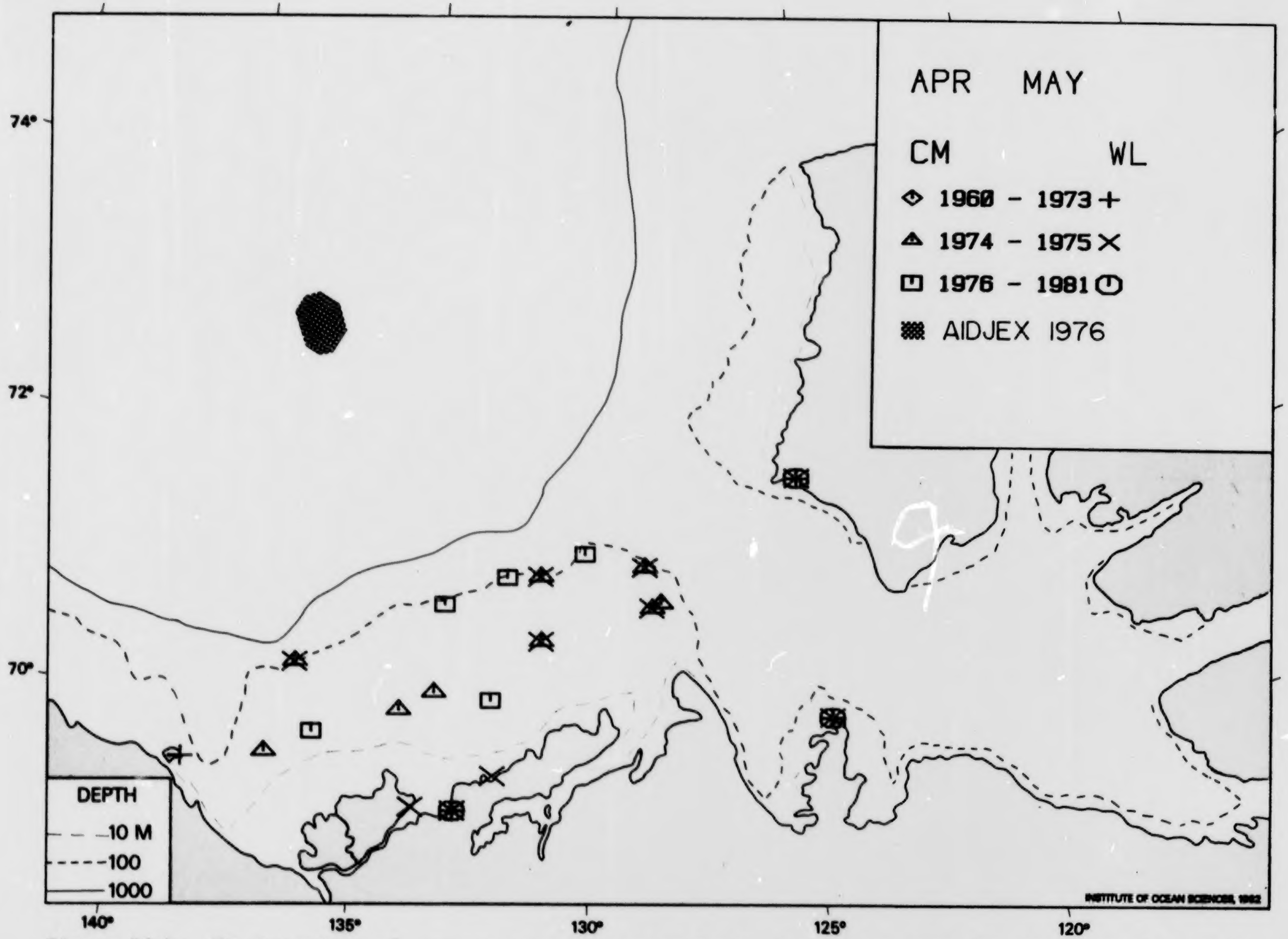


Figure 9(c): The locations of current meter and water level time series data for the bi-monthly period April-May.

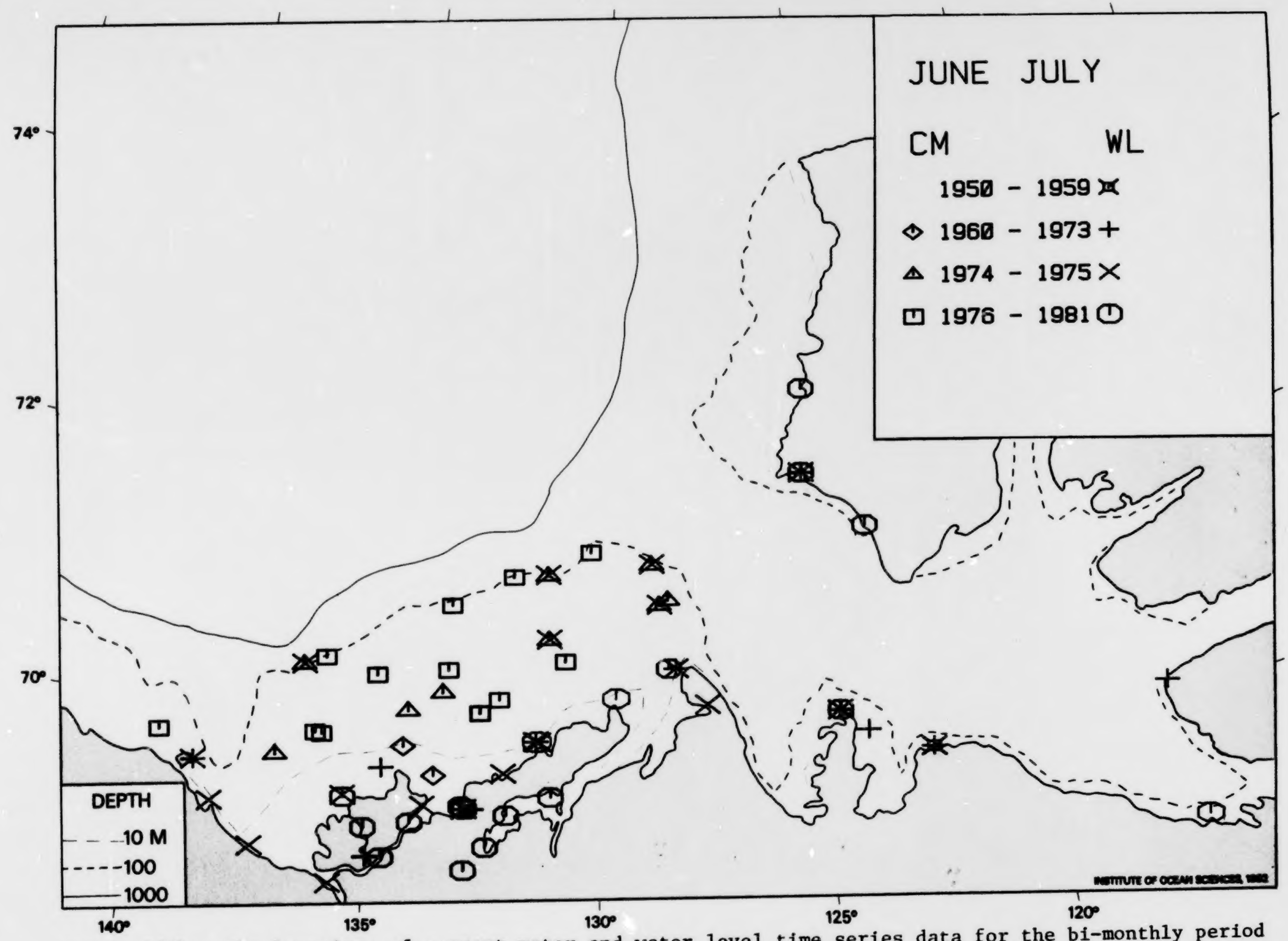


Figure 9(d): The locations of current meter and water level time series data for the bi-monthly period June-July.

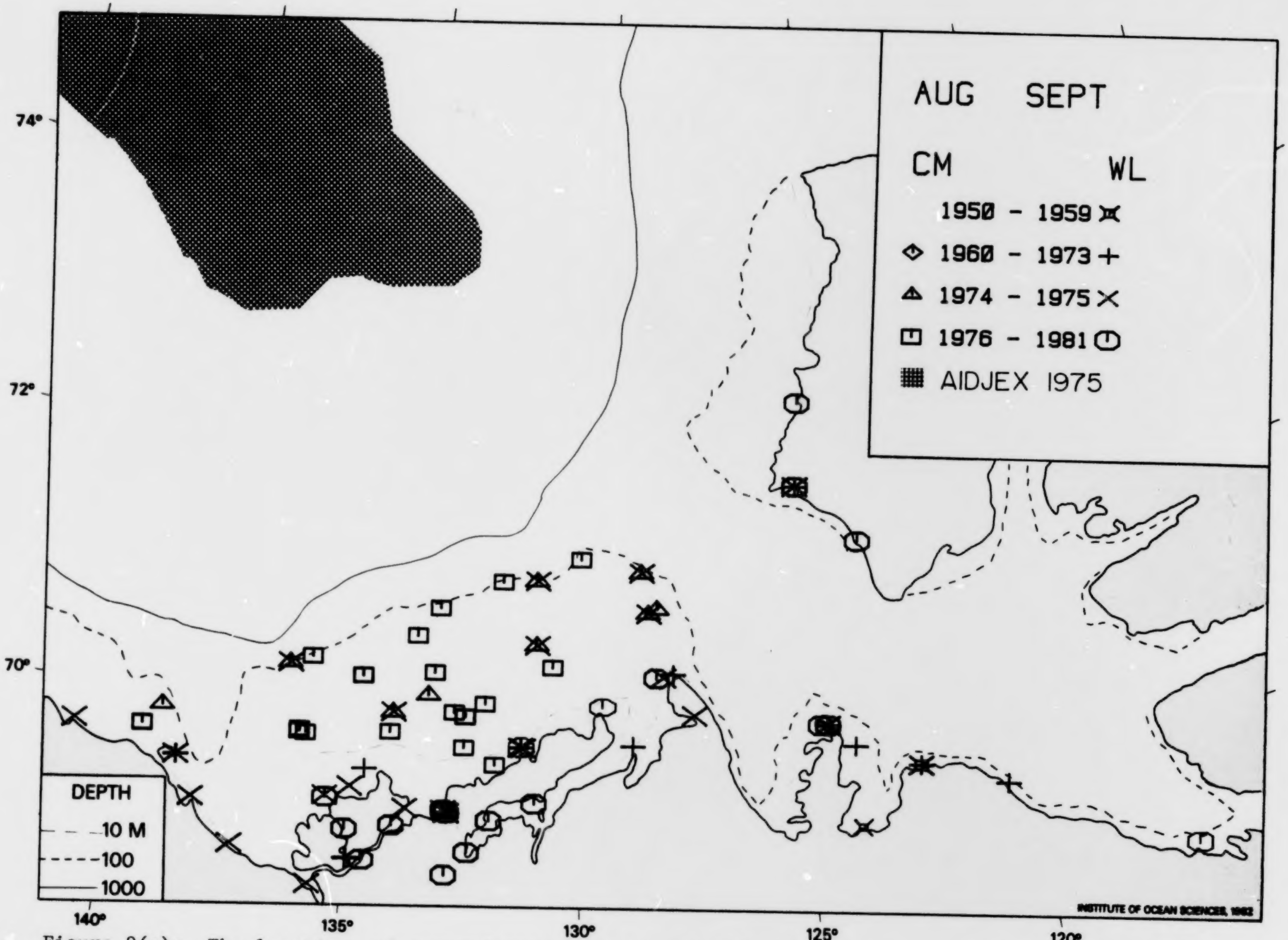


Figure 9(e): The locations of current meter and water level time series data for the bi-monthly period August-September.

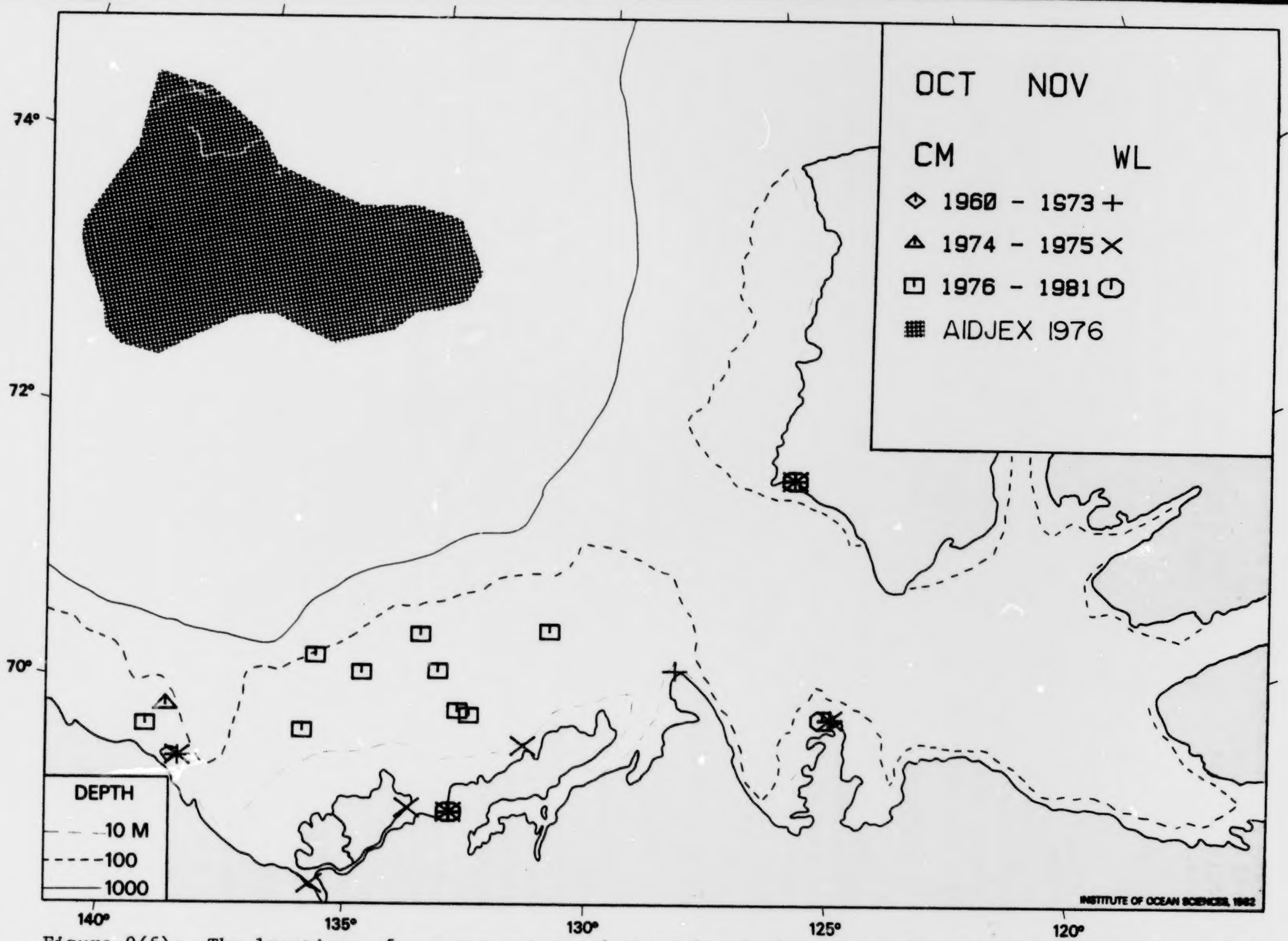


Figure 9(f): The locations of current meter and water level time series data for the bi-monthly period October-November.

Over the deep waters of the southeastern Beaufort Sea, where almost all of the available data was collected through the permanent polar sea-ice by the AIDJEX project, data are not present for June to July. In the February to April period, data were collected in 1970 and 1971 as part of the AIDJEX pilot programs, while the main AIDJEX experiment of 1975-1976 included data collection within the study area from August 1975 to May 1976.

CURRENT METER DATA

Current meter data are primarily available for the continental shelf off Mackenzie Bay and the Tuktoyaktuk Peninsula during the open water summer months. However, in recent years (1975-1976 and 1980-1981), limited current meter data have been obtained in the autumn, winter and spring months. The only other source of current meter data is the AIDJEX projects where the seasonal distribution matches that described above for the temperature-salinity data.

WATER LEVEL DATA

More water level data are available for the summer and early autumn months than for other times of the year. The permanent stations at Tuktoyaktuk, Cape Parry and Sachs Harbour are susceptible to ice damage in the winter and spring months. The temporary coastal water level gauges were usually operated only in the summer and early autumn months. Some of the bottom pressure stations were used at other times of the year.

6.3 EXTENDED TIME SERIES AND SYNOPTIC DATA

SYNOPTIC DATA SETS

In some years the existence of two or more data sets collected at the same time provides a combined data set with near-synoptic coverage over a relatively large area. The combined data sets may improve coverage within a given area, extend coverage to a larger area or allow comparison of simultaneous processes in different areas. In the Beaufort Sea, possibilities for combinations are largely confined to temperature-salinity data collected during the open water season. Data sets were considered near-synoptic if their measurement periods overlapped significantly. The table below lists near-synoptic data sets by year and general area of coverage.

LIST OF NEAR-SYNOPTIC DATA SETS

1951

Data set number	Areas
51-0001	Tuktoyaktuk Shelf,
51-0002	Amundsen Gulf

1952

Data set number	Area
52-0001	Tuktoyaktuk Shelf,
52-0002	Continental Slope

1954

Data set number	Area
54-0001	Tuktoyaktuk Shelf,
54-0002	Amundsen Gulf, Banks
54-0003	Island shelf, Continental Slope

1960

Data set number	Areas
60-0001	Continental slope,
60-0002	Tuktoyaktuk shelf

1970

Data set number	Areas
70-0002	Tuktoyaktuk Shelf,
70-0003	Mackenzie Delta

1974

Data set number	Areas
74-0002	Mackenzie Delta,
74-0003	Tuktoyaktuk shelf

1975

Data set number	Areas
75-0002	Mackenzie Delta,
75-0003	Tuktoyaktuk shelf,
75-0004	Canada Basin

1977

Data set number	Areas
77-0001	Mackenzie Bay,
77-0002	Tuktoyaktuk shelf,
77-0003	Amundsen Gulf

EXTENDED TIME SERIES

Repeated measurements in the same area may allow long-term trends to be detected and levels of variability to be estimated. With the exception of water level data from the permanent tide gauges, such repeated measurements are available only for summer temperature and salinity data, current meter data and winter data of any sort being too sparse. Repeated measurements have been made in several areas. The table below lists the areas in which extended time series are available.

LIST OF EXTENDED TIME SERIES BY AREA

Mackenzie Delta	**Tuktoyaktuk Shelf**	**Tuktoyaktuk Harbour**	**Continental Slope**	**Canada Basin**	**Amundsen Gulf**
52-0001	52-0001	62-0002	50-0001	59-0001	51-0001
*	52-0002	62-0003	51-0001		51-0002
70-0003		62-0004	51-0002	70-0001	52-0001
	54-0001	63-0002		71-0003	53-0001
73-0002	54-0002	63-0003	54-0001		54-0002
74-0001			54-0002	75-0005	54-0003
74-0003	57-0001				
75-0001	58-0001		59-0001		77-0003
75-0004	59-0002		59-0002		
75-0012	60-0001		60-0001		
76-0003	60-0003		60-0002		
76-0004					
77-0001	70-0002				
	73-0003				
	74-0002				
	74-0007				
	74-0008				
	75-0002				
	75-0006				
	75-0012				
	76-0001				
	76-0004				
	77-0004				
	78-0001				
	79-0003				
	80-0002				

* missing lines signify gaps of more than one year.

6.4 CONCLUSIONS

This inventory of Beaufort Sea oceanographic data will permit oceanographers and others to exploit more fully the existing data base. The inventory's coverage in space and time should allow investigators to decide how much of the data base pertains to their specific requirements and concerns, without having the data themselves in hand. For example, there are several regions and seasons for which the data base is inadequate to describe the general circulation. With the exception of the central, deep portion of the Beaufort Sea (covered by AIDJEX), winter measurements are generally lacking. In particular, no measurements are available for the breakup period over the Tuktoyaktuk shelf. Existing data (at any season) are inadequate for a basic description of the circulation in Amundsen Gulf and over the shelf west of Banks Island.

The inventory will enable oceanographers to identify data sets which have never been analyzed and might fruitfully be exploited. Some of the sets require more work than others to be rendered useful. First, there are those which have received no processing, and which will require checking for errors and the computation of basic derived quantities before being worked into standard physical oceanographic display forms. There are numerous small sets of fisheries and biology-related data in this class.

Less work is required for those sets of data which have received some basic processing, but which have never been examined from a physical point of view. In addition to the Canmar data mentioned above, there are several other significant data sets which warrant this type of further data processing. Sets 60-0002 (Northwind) and 73-0002 (taken by the Arctic Biological Station) both provide transects along the Tuktoyaktuk shelf which have not yet been examined. The temperature and salinity data collected by Healey (1970) near the Delta (set 70-0003) have never been examined for their physical content. In Amundsen Gulf there are two sets of data in particular which should be analyzed: set 77-0003 (collected by the Pandora II) which is the best group of measurements available for describing the overall circulation of the Gulf, and set 63-0001, which provides a group of stations in the neighbourhood of Cape Parry.

By cataloguing all of the data, the inventory allows the identification of data sets which complement each other in space or time. The tables in Section 6.3 list such cases.

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8. DATA INVENTORY TABLE

Table 1 below presents a summary listing of the data sets included in this inventory. The table lists all the data contained in the inventory sequentially by data set number. Water property, moored current meter, surface drift and water level data are fully catalogued. BT data, because of their limited usefulness in Arctic waters without accompanying salinity data, have not been catalogued in detail. Their existence in any particular data set has been noted in Table 1, however, and their distribution may in general be deduced from the pattern of stations for a particular cruise, as they were usually collected at and along the track between stations. A large class of current meter data, consisting of over-the-side measurements of short duration made with fixed-depth or profiling current meters has not been included unless a) a continuous record spanning two or more tidal cycles exists, or b) repeated profiles were made at the same site for a period of 5 or more days. Most of this type of data was collected by icebreakers in the 1950's.

Each column of the table contains the following information (symbols and abbreviations used in each column are explained as well):

Column 1 - Data Set I.D.

- contains the data set identifier number, which is of the form yy-nnnn, where yy is the last two digits of the year in which the data set was collected, and nnnn is the sequential number of the data set for that particular year. (The series of data set numbers applies to the whole set of inventories; gaps may appear in the sequence in any one inventory where data sets exist only in other areas or disciplines. A data set which appears in 2 or more areas or disciplines will have the same number in every case.) Data sets may be subdivided by the addition of a letter at the end of the number. Subdivisions apply only within this report; the reasons for a subdivision are listed in Appendix 1.

Column 2 - Collecting agency, ship

- contains the name of the ship (underlined) from which the data were collected. If no ship was used (e.g. aircraft surveys), the name of the collecting agency appears. Where two or more agencies were using the same ship, both the ship and agency names are given.

Column 3 - Dates of Measurements

- gives the dates spanning the period during which measurements were taken in the area covered by the inventory. The year is given by the first two digits of the data set number in column 1, unless the measurement period spans the end of a year, in which case it is given explicitly.

Column 4 - Quantity measured

- lists the physical parameters measured in the data set.

Column 5 - Instruments or methods used

- lists the instruments and methods used to make the measurements. The entries appear opposite the names (in column 3) of the quantities they measure. A question mark after the entry denotes an assumption, i.e. that the method used was not explicitly stated and an assumption was made from standard practice at the time. A question mark alone means that the instrument used is unknown.

Column 6 - Estimate of data precision and accuracy

- lists the estimates of the precision and accuracy for each instrument opposite the entry for that instrument in column 5. Where possible, estimates made by the original investigators are used. They are entered as two members of the form $\pm n_1$, $\pm n_2$ where n_1 is the precision and n_2 the accuracy. Where investigators' estimates were not available, the following special symbols and entries have been used:

$[\pm n_1, \pm n_2]$: standard oceanographic methods were used, which would normally result in these values.

$\pm n_1$ @: manufacturer's specifications for that instrument.

$\pm n_1$?: an estimate has been given which appears unreasonable for reasons detailed in Appendix 1.

The column is blank where no information was available and no reasonable assumption could be made.

Column 7 - Data rating number

- carries the dating rating number assigned as explained in Section 5. The following special symbols may appear beside the rating number:

*: Errors were found when the data were tested as described in Section 5.3.

+: No errors were found when the data were tested as described in Section 5.3.

no symbol: The data were not tested.

Column 8 - Area

- lists the subareas in which the majority of the measurements in the data set were taken. (The subareas are defined in Figures 1a and 1b.)

Column 9 - Concurrent measurements

- lists known measurements in other disciplines taken as part of the data set. Standard chemical symbols have been used for chemical parameters such as oxygen (O_2), phosphate (PO_4), etc. The following special symbols have also been used

Chl.A.: Chlorophyll - A.

POC: particulate organic carbon

SPM: suspended particulate matter

D.O.: dissolved oxygen

COD: chemical oxygen demand.

Column 10 - Source or reference

- lists a source or reference for the data sets. References where available are to primary data reports and are given as author (year). Data sets held in the data banks at the Marine Environmental Data Centre, Ottawa or at the National Oceanographic Data Center, Washington D.C. are identified, respectively by the entries MEDS# and NODC# followed by the data bank's identity number. (The entry MEDS refers to data possessed by MEDS which has not yet been entered in their data bank at the time of writing (1982).) Data which have not yet (1982) been published or submitted to a data bank have the collecting agency listed as the source. Appendix 2 lists addresses and contacts for these sources.

TABLE 1: SUMMARY LISTING OF DATA SETS

Data Set I.D.	Ship or collecting agency	Dates of measurements	Quantity measured	Instruments or methods used ?=Unknown	Estimate of Data precision and accuracy	Data rating number	Area	Concurrent measurements	Source or reference
35-0001	ST. ROCHE	Aug.4-28	Temperature (surface) Salinity (surface)	Reversing thermometer Hydrometer	[±.02C°,±.03C°] [±0.2°/oo,±0.2°/oo]	2	Tuktoyaktuk Continental Shelf, Amundsen Gulf	Biological Collections	Tully(1952) (not plotted in section 10).
37-0001	ST. ROCHE	Aug.17-Sept.5	Temperature (surface) Salinity (surface)	Reversing thermometer Hydrometer	[±.02C°,±0.03C°] [±0.2°/oo,±0.2°/oo]	2	Tuktoyaktuk Continental Shelf Amundsen Gulf	Biological Collections	Tully(1952) (not plotted in section 10).
50-0001	USS BURTON ISLAND	Aug.19-23	Temperature Salinity	Reversing thermometers BT Knudsen titration	[±.02C°,±.03C°] [±0.2°C,±0.2C°] [±.02°/oo,±.04°/oo]	3*	Continental Slope	O_2, Plankton Hauls	MEDS# 31BI01530 USNHO (1954) NODC# 3150153
51-0001	USS BURTON ISLAND	Sept.14-21	Temperature Salinity	Reversing thermometers, BT Knudsen titration	[±.02C°,±.03C°] [±0.2°C,±0.2C°] [±.02°/oo,±.04°/oo]	3	Continental Slope Canada Basin	O_2, Plankton Hauls	MEDS USNHO (1954) NODC# 3150400
51-0002	CANCOLIM II	Aug. 20-Sept. 15	Temperature Salinity	Reversing thermometers Knudsen titration	[±.02°C, ±.02C°] [±.02°/oo,±.04°/oo]	3*	Amundsen Gulf Tuktoyaktuk Continental Shelf	Plankton Tows	MEDS# 181351801 Cameron (1952)
51-0004	CANADIAN HYDROGRAPHIC SERVICE	Aug.17-Sept.8	Water Surface Elevation	?		2	Amundsen Gulf		Canadian Hydrographic Service
52-0001	CANCOLIM II	July 18-Aug. 31	Temperature Salinity	Reversing thermometers Knudsen titration	±.02C°, ±.02C° ±.02°/oo,±.1°/oo	1*	Tuktoyaktuk Continental Shelf	O_2	MEDS# 181352807 Cameron (1953)
52-0002	USS BURTON ISLAND	Sept.2-10	Temperature Salinity	Reversing thermometers, BT Knudsen titration	[±.02C°,±.03C°] [±0.2C°,±0.2C°] [±.02°/oo,±.04°/oo]	3	Continental Slope	O_2, Si, PO_4 Plankton Hauls	MEDS USNHO (1954) NODC# 3150400
52-0004	CANADIAN HYDROGRAPHIC SERVICE	Aug.1-Aug.29	Water Surface Elevation	?		2	Amundsen Gulf		Canadian Hydrographic Service

TABLE 1: SUMMARY LISTING OF DATA SETS (Cont'd)

Data Set I.D.	Ship or collecting agency	Dates of measurements	Quantity measured	Instruments or methods used ?=Unknown	Estimate of Data precision and accuracy	Data rating number	Area	Concurrent measurements	Source or reference
53-0001	USS BURTON ISLAND	Aug.8-11, 25	Temperature Salinity	Reversing thermometers BT Knudsen titration	[±.02C°, ±.03C°] [±.2C°,±0.2C°] [±.02°/oo,±.04°/oo]	3	Amundsen Gulf	O_2,Si,PO_4 Plankton Hauls	MEDS# 31BI04300 USNHO (1954) NODC# 3150430
53-0004	CANADIAN HYDROGRAPHIC SERVICE	Sept.6-8	Water Surface Elevation	?		0	Amundsen Gulf		Canadian Hydrographic Service (not plotted in section 10)
54-0001	LABRADOR	Sept.12-13	Temperature Salinity	Reversing thermometers Knudsen titration	[±.02C°,±.03C°] [±.02°/oo, ±.04°/oo]	3*	Continental Slope		MEDS# 180354189 Bailey (1955)
54-0002	USS BURTON ISLAND	Aug. 8-10, Sept. 7-13	Temperature Salinity	Reversing thermometers Knudsen titration	[±.02C°,±.03C°] [±.02°/oo,±.04°/oo]	3	Continental Slope Tuktoyaktuk Continental Shelf	O_2,Si,PO_4	MEDS NODC# 3150456 USNHO (1956)
54-0003	USCGC NORTHWIND	Aug. 9-14 Sept. 7-10	Temperature Salinity	Reversing thermometers Knudsen titration	[±.02C°,±.03C°] [±.02°/oo,±.04°/oo]	3	Amundsen Gulf	O_2,Si,PO_4	MEDS NODC# 3150457 USNHO (1956)
55-0001	USCGC NORTHWIND	Aug.27- Sept. 4	Temperature Salinity	Reversing thermometers Knudsen titration	[±.02C°,±.03C°] [±.02°/oo,±.04°/oo]	3	Continental Slope	Transparency	MEDS NODC# 3150518
55-0002	CANADIAN HYDROGRAPHIC SERVICE	July 25- Aug. 21	Water Surface Elevation	Temporary shore-based tide gauge	[±1 cm]	2	Amundsen Gulf		Canadian Hydrographic Service
56-0001	USS REQUISITE	July 30- Aug. 27	Temperature Salinity	Reversing thermometers Knudsen titration	[±.02C°,±.03C°] [±.02°/oo,±.04°/oo]	3	Tuktoyaktuk Continental Shelf		MEDS USNHO (1960) NODC# 3150548
57-0001	USCGC SPAR	July 17-23	Temperature Salinity	Reversing thermometers Knudsen titration	[±.02C°,±.03C°] [±.02°/oo,±.04°/oo]	3	Tuktoyaktuk Continental Shelf	Transparency	MEDS USNHO (1959) NODC# 3150570
57-0002	USS ATKA	Aug. 3-18	Temperature Salinity	Reversing thermometers Knudsen titration	[±.02C°,±.03C°] [±.02°/oo,±.04°/oo]	3	Tuktoyaktuk Continental Shelf	Transparency	MEDS USNHO (1959) NODC# 3150570
58-0001	USS BURTON ISLAND	Sept.2-4	Temperature Salinity	Reversing thermometers, BT Knudsen titration	[±.02C°,±0.3C°] [±0.2C°,±.03C°] [±.04°/oo,±.03°/oo]	3	Continental Slope	Plankton Hauls	MEDS Marine Surveys Div.(1963a) NODC# 3150574

TABLE 1: SUMMARY LISTING OF DATA SETS (Cont'd)

Data Set I.D.	Ship or collecting agency	Dates of measurements	Quantity measured	Instruments or methods used ?=Unknown	Estimate of Data precision and accuracy	Data rating number	Area	Concurrent measurements	Source or reference
59-0001	ICE ISLAND T-3	June 9-Sept.10	Temperature	Reversing thermometers, BT	±.02C° [±0.2C°,±0.2C°]	3	Canada Basin	O_2,Si	Kusunoki et al.(1962) Kusunoki (1962) NODC# 3150738
			Salinity	Knudsen titration	±.01°/oo				
59-0002	USS STATEN ISLAND	Aug.10-Sept.3	Temperature	Reversing thermometers, BT,	±.03C°	3	Tuktoyaktuk Continental Shelf		MEDS Marine Surveys Div.(1963b) NODC# 3150636
			Salinity	Salinometer	[±.01°/oo,±.02°/oo]				
60-0001	USS BURTON ISLAND	Aug. 16-Sept. 19	Temperature	Reversing thermometers, BT	[±.02C°,±.03C°] [±0.2C°,±0.2C°]	3	Continental Slope		MEDS Marine Surveys Div.(1964)) NODC# 3150667
			Salinity	Salinometer	[±.01°/oo,±.02°/oo]				
60-0002	USCGC NORTHWIND	Oct. 20-21	Temperature	Reversing thermometers	[±.02C°,±.03C°]	3	Tuktoyaktuk Continental Shelf		MEDS NODC# 3150841
			Salinity	Salinometer?	±.01°/oo				
60-0003	SALVELINUS	Aug.3-31	Temperature	Reversing thermometers	[±.02C°,±.03C°]	3	Thetis Bay Phillips Bay	Fish	Grainger & Lovrity (1975)
			Salinity	Knudsen titration	[±.02°/oo,±.03°/oo]				
61-0001	SALVELINUS	July 6-Aug.27	Temperature	Reversing Thermometers	[±.02C°,±.03C°]	3	Eskimo Lakes & Liverpool Bay	Fish, Zooplankton	Grainger & Lovrity (1975)
			Salinity	Knudsen titration	[±.02°/oo,±.04°/oo]				
61-0002	CANADIAN HYDROGRAPHIC SERVICE	Summer 1961 to Present	Water Surface Elevation	Shore-mounted tide gauge	±1 cm, ±10 cm ±10 min	2	Kugmallit Bay		Canadian Hydrographic Service Water Survey of Canada
62-0001	SALVELINUS (ARCTIC BIOLOGICAL STATION)	July 15-Aug. 29	Temperature	Reversing thermometers	[±.02C°,±.03C°]	3*	Eskimo Lakes & Liverpool Bay	O_2,Fish, Invertebrates	MEDS# 180462377 Grainger & Lovrity (1975) Canadian Oceanographic Data Centre (1963)
			Salinity	Knudsen titration	[±.02°/oo,±.04°/oo]				
62-0002	NATIONAL RESEARCH COUNCIL OF CANADA	April 27-May 6	Temperature	Thermistors (NRC)	±.01C°, ±.02C°	3	Kugmallit Bay		MEDS# 180762447 Kelly (1967)
			Salinity	Autolab Salinometer	±.01°/oo, ±.02°/oo				
62-0003	NATIONAL RESEARCH COUNCIL OF CANADA	Nov. 24-Dec. 10	Temperature	Thermistors(NRC) BT	±.01C°, ±.03C° ±0.1°C, ±0.2°C	1*	Kugmallit Bay		MEDS# 180762448 Kelly (1967)
			Salinity	Wayne Kerr Portable Salinometer	±0.1°/oo, ±0.5°/oo				

TABLE 1: SUMMARY LISTING OF DATA SETS (Cont'd)

Data Set I.D.	Ship or collecting agency	Dates of measurements	Quantity measured	Instruments or methods used ?=Unknown	Estimate of Data precision and accuracy	Data rating number	Area	Concurrent measurements	Source or reference
62-0004	NATIONAL RESEARCH COUNCIL OF CANADA	Dec. 14, 1962-May 1, 1963	Temperature Salinity	BT Autolab Salinometer	±0.1C°, ±0.2C° ±0.01°/oo, ±0.02°/oo	3	Kugmallit Bay		MEDS# 180762449 Kelly (1967)
63-0001	SALVELINUS	July 24-Aug. 28	Temperature Salinity	Reversing thermometers BT N.I.O. Bridge Salinometer	[±.02C°,±.03C°] [±0.2C°,±0.2C°] [±.01°/oo,±.02°/oo]	3*	Amundsen Gulf	O_2,Fish, Invertebrates	MEDS# 180463002 Canadian Oceanographic Data Centre (1964)
63-0002	NATIONAL RESEARCH COUNCIL OF CANADA	April 19-May 5	Temperature Salinity	Thermistors (NRC) Wayne-Kerr Portable Salinometer RS-5 Portable Salinometer	±.01C°, ±.03C° ±0.1°/oo, ±0.5°/oo ±0.3°/oo, ±0.5°/oo	3*	Kugmallit Bay		MEDS# 180763004-180763010 Kelly (1967)
63-0003	RICHARDSON (NRC)	July 26-Sept. 16	Temperature Salinity	BT Autolab Salinometer	±0.1C°, ±0.2C° [±.02°/oo,±.04°/oo]	3	Kugmallit Bay		MEDS# 180763002 Kelly (1967)
64-0001	SALVELINUS (ARCTIC BIOLOGICAL STATION)	July 6-Sept. 8	Temperature Salinity	? ?		2			MEDS# 180464001
64-0002	USCGC NORTHWIND	Aug. 19	Temperature Salinity	Reversing Thermometers Salinometer?	[±0.02°C,±.03C°] [±0.01°/oo,±.02°/oo	3	Tuktoyaktuk Continental Shelf		MEDS NODC# 315023 8
64-0003	CANADIAN HYDROGRAPHIC SERVICE	July 6-Sept. 1	Water Surface Elevation	Temporary shore-mounted tide gauge		1	Mackenzie Bay		Canadian Hydrographic Service
65-0001	CANADIAN HYDROGRAPHIC SERVICE	July 3-Aug. 31	Water Surface Elevation	Temporary shore-mounted tide gauge		2	Mackenzie Bay		Canadian Hydrographic Service
66-0001	CANADIAN HYDROGRAPHIC SERVICE	June 20, 1966 to Present	Water Surface Elevation	Shore-mounted tide gauge	±1 cm, ±10 cm ±10 min.	2*	Amundsen Gulf		Canadian Hydrographic Service Water Survey of Canada
66-0002	CANADIAN HYDROGRAPHIC SERVICE	July 5-Aug. 24	Water Surface Elevation	Temporary shore-mounted tide gauge		2	Mackenzie Bay		Canadian Hydrographic Service

TABLE 1: SUMMARY LISTING OF DATA SETS (Cont'd)

Data Set I.D.	Ship or collecting agency	Dates of measurements	Quantity measured	Instruments or methods used ?=Unknown	Estimate of data precision and accuracy	Data rating number	Area	Concurrent measurements	Source or reference
69-0001	USS STATEN ISLAND	Aug. 8-10	Temperature	Reversing thermometers	[±0.02C°, ±.03C°]	3	Continental Slope	O_2, PO_4, Si, N	MEDS# 31SI21750 NODC# 3152175
			Salinity	Salinometer?	[±0.01°/oo, ±.02°/00]				
70-0001	AIDJEX'70 PILOT PROJECT	March 20-April 2	Temperature	Reversing thermometers	±.01C°	1*	Canada Basin		MEDS# 314K16770 Coachman & Newton (1972) NODC# 3151677
			Salinity Under-ice Currents	Salinometer Braincon 316	±.01°/oo				
70-0002	HUDSON	Aug. 28-Oct. 7	Temperature	Reversing thermometers	[±0.02C°, ±.03C°]	3*	Continental Slope Tuktoyaktuk Continental Shelf	Vertical Plankton Tows	MEDS# 181069050 Vilks (1973)
			Salinity	Salinometer	[±0.01°/oo, ±.02°/oo]				
70-0003	RICHARDSON	July 15-Sept. 4	Temperature Salinity	? Industrial Instruments Portable Salinometer	±0.1°/oo [3]	2*	Kugmallit Bay	Mineralogy	MEDS# 180270013 Healey (1971)
			Currents	Hydro Products 450S	±15° [3]				
			Surface Drift	Visual drifters	±0.1 n.m. position				
70-0004	CANADIAN HYDROGRAPHIC SERVICE	July 15-Sept. 4	Water Surface Elevation	Temporary shore-based tide gauge	±1 cm, ±10 cm ±10 min.	2	Amundsen Gulf Mackenzie Bay Herschel Is.		Canadian Hydrographic Service
70-0005	IMPERIAL OIL LTD. (OCEANOGRAPHIC SVCS. INC.)	Feb. 23-June 1	Under-Ice Currents Salinity	Geodyne 102	3 cm/sec [3] threshold	1	Mackenzie Bay Kugmallit Bay		Oceanographic Services Inc. (1970) Crossdale (1970) (Not plotted in section 10)
71-0001	SALVELINUS	July 18-20	Temperature	Reversing thermometers	[±.02C°, ±.03C°]	3*	Tuktoyaktuk Continental Shelf	Zooplankton	MEDS# 180471002 Grainger & Lovrity (1975)
			Salinity	Bissett-Berman 6230 Salinometer	[±.01°/oo, ±.02°/oo]				
71-0002	CANADIAN HYDROGRAPHIC SERVICE	July-Aug.	Water Surface Elevation	Temporary shore-based tide gauge	±1 cm, ±10 cm	2	McKinley Bay		Canadian Hydrographic Service

TABLE 1: SUMMARY LISTING OF DATA SETS (Cont'd)

Data Set I.D.	Ship or collecting agency	Dates of measurements	Quantity measured	Instruments or methods used ?=Unknown	Estimate of data precision and accuracy	Data rating number	Area	Concurrent measurements	Source or reference
71-0003	AIDJEX PILOT STUDY	March 16-April 2	Temperature Salinity Under-Ice Currents	Reversing thermometers Salinometer Savonius Rotor Meter	[±.02C°,±.03C°] ±.01°/oo	4*	Canada Basin		MEDS# 314K19470 Hunkins (1972) NODC# 3151974
71-0004	ARCTIC BIOLOGICAL STATION	Aug. 19-Sept. 9, Dec. 15	Temperature Salinity	Reversing thermometers Bisset-Berman 6230 Salinometer	[±.02C°,±.03C°] [±.01°/oo,±.02°/oo]	3	Eskimo Lakes	O_2,Nutrients, Chl.A,pH,POC Secchi depth	MEDS# 180471002 Grainger et al. (1977)
72-0001	DALHOUSIE UNIVERSITY	March 21-April 9	Temperature Salinity	Reversing thermometers Salinometer	[±0.02C°,±.03C°] ±0.01°/oo	3*	Continental Slope	Vertical Plankton Tows	MEDS# 182872072 Vilks (1973)
72-0004	SALVELINUS (ARCTIC BIOLOGICAL STATION)	March 17-Nov. 25	Temperature Salinity	Reversing thermometers Bissett-Berman 6230 Salinometer	[±.02°C,±.03°/oo] [±.01°/oo,±.02°/oo]	3*	Eskimo Lakes	Plankton? Fish?	MEDS# 180472001 Grainger et al.(1977)
72-0007	IMPERIAL OIL LTD.	July 6-Sept. 19	Temperature Salinity	Martec Instruments Ltd. TDC Meter		2	Mackenzie Bay Kugmallit Bay	Plankton, Benthos,O_2, pH,CO_2,HCO_3	Imperial Oil Ltd. Slaney (1973c)
72-0009	CANADIAN HYDROGRAPHIC SERVICE	August 1972 to Present	Water Surface Elevations	Shore-based tide gauge	±1 cm,±10 cm	2	Banks Island Continental Shelf		Canadian Hydrographic Service
72-0010	CANADIAN HYDROGRAPHIC SERVICE	August	Water Surface Elevation	Temporary shore-based tide gauges	±1 cm,±10 cm	2	Kugmallit Bay Mackenzie Bay Liverpool Bay		Canadian Hydrographic Service
73-0001	IMPERIAL OIL LTD.	March 20-21	Temperature Salinity	ARA Thermistor Sproule Cell		2	Mackenzie Bay	O_2,Si,	Imperial Oil Ltd. Slaney (1973c)
73-0002	NORTH STAR OF HERSCHEL ISLAND	July 20-27	Temperature Salinity	YSI Model 33 S-C-T Meter	±0.5C° @ ±0.7°/oo @	3*	Tuktoyaktuk Continental Shelf	O_2,Nutrients Chl.A,POC, Zooplankton	MEDS# 180473002 Grainger & Lovrity (1975)
73-0003A	ARCTIC BIOLOGICAL STATION	Feb. 24-Oct. 1	Temperature Salinity	Reversing thermometers Bissett-Berman 6230 Salinometer	[±.02C°,±.03C°] [±.01°/oo,±.02°/oo]	3	Eskimo Lakes	O_2,Nutrients, Chl.A,POC,pH, Secchi depth	MEDS# 180473001 Grainger et al. (1977)

TABLE 1: SUMMARY LISTING OF DATA SETS (Cont'd)

Data Set I.D.	Ship or collecting agency	Dates of measurements	Quantity measured	Instruments or methods used ?=Unknown	Estimate of data precision and accuracy	Data rating number	Area	Concurrent measurements	Source or reference
73-0003	ARCTIC BIOLOGICAL STATION	July 4- Aug. 29	Temperature Salinity	YSI Model 33 S-C-T Meter	±0.5C° ? ±0.7°/oo ?	3	Eskimo Lakes & Liverpool Bay	Nutrients, Chl.A, Secchi depth	Grainger et al. (1977)
73-0004	CANADIAN HYDROGRAPHIC SERVICE	May 25- Dec. 31	Water Surface Elevation Bottom Pressure	Temporary shore-based tide gauges U.B.C. Gauge		2	Amundsen Gulf Liverpool Bay Herschel Is.		Canadian Hydrographic Service Huggett et al. (1975)
74-0001	IMPERIAL OIL LTD.	March 11- April 18	Temperature Salinity	YSI Model 33 SCT Meter	±0.5C° ? ±0.7°/oo ?	2	Mackenzie Bay	Si,O_2,PO_4, NO_3,pH,HCO_3, total carbon Plankton,Benthos	Imperial Oil Ltd. Slaney (1974)
74-0002	THETA	Aug. 13- Sept.5	Temperature Salinity Current Profiles	Reversing thermometers, Autosal and Guildline 8101-8102 STD, Bissett-Berman 6230 Salinometer Hydro-Products Model 460	[±.02C°,±.03C°] ±.01°/oo ?	4	Tuktoyaktuk Continental Shelf	Turbidity	Herlinveaux et al. (1976a, 1976b)
74-0003	IMPERIAL OIL LTD.	August 2- Sept. 29	Temperature Salinity	YSI SCT Meter	±0.5C° ? ±0.7°/oo ?	3	Mackenzie Bay	Plankton,O_2, Benthos, Chemical	Imperial Oil Ltd. Slaney (1975)
74-0004	INSTITUTE OF OCEAN SCIENCES	August 3- Sept. 19	Surface & Ice Drift	Aircraft-Tracked Drogues	±500 m in position	4	Mackenzie Bay Kugmallit Bay		McNeill & Garrett (1975)
74-0005	INSTITUTE OF OCEAN SCIENCES	May 5- Dec. 31	Bottom Currents Bottom Pressure	Aanderaa RCM4 Aanderaa TG1	±1 cm/sec ±10° direction	1 4	Tuktoyaktuk Cont. Shelf Liverpool Bay Mackenzie Bay Kugmallit Bay Phillips Bay		Huggett et al.(1977) Huggett et al.(1975)
74-0006	CANADIAN HYDROGRAPHIC SERVICE	January- November	Water Elevation	Temporary shore based tide gauges	±1 cm, ±10 cm	2	Herschel Island		Canadian Hydrographic Service

TABLE 1: SUMMARY LISTING OF DATA SETS (Cont'd)

Data Set I.D.	Ship or collecting agency	Dates of measurements	Quantity measured	Instruments or methods used ?=Unknown	Estimate of data precision and accuracy	Data rating number	Area	Concurrent measurements	Source or reference
74-0021	DEPT. OF ENVIRONMENT FISH. & MAR. SVC.	April 1-Sept. 17	Temperature Salinity	YSI Model 43 Telethermometer	±0.5C° ? ±0.7°/oo ?	1	Mackenzie Bay to Kay Point	Fish samples, O_2, alkalinity, pH	Kendel et al. (1975)
74-0022	AQUATIC ENV. LTD. for ARCTIC GAS STUDY	Oct. 1-Apr.5, 1975	Temperature Salinity	Mercury therm. Beckman RB3Y147 Conductivity Meter		1	Mackenzie Bay	Fish samples, O_2, pH Turbidity	Aquatic Environments Ltd. (1975)
75-0001	INSTITUTE OF OCEAN SCIENCES	April 26-May 10	Temperature	Guildline 8202-8201	±.02C°	4	Banks Island & Tuktoyaktuk Continental Shelves	Turbidity	Herlinveaux et al. (1976a, 1976b)
			Salinity	CTD	±.02°/oo				
			Temperature Salinity	Hydrolabs TC 2	±1°C ? ±1°/oo ?	1			
			Current profiles	Hydro-Products Model 460					
			Ice drift	Loran-C					
75-0002	PANDORA II (ARCTIC MARINE SCIENCES, I.O.S.)	Aug.5-24	Temperature	Guildline 8101-8202 CTD	±.005C° ? ±.01°/oo ?	4	Tuktoyaktuk Continental Shelf	Turbidity	Herlinveaux et al. (1976a, 1976b)
			Salinity	Reversing thermometers Autosal Bench Salinometer	[±.02C°, ±.03C°] [±.01°/oo, ±.02°/oo]				
			Current profiles	Hydro-Products Model 460					
75-0003	INSTITUTE OF OCEAN SCIENCES	July 27-Sept.10	Surface drift	Aircraft-Tracked Drogues	±500 m position	4	Tuktoyaktuk Continental Shelf		McNeill & Garrett (1975)
75-0004	IMPERIAL OIL LTD.	July 8-Aug. 20	Temperature Salinity	YSI SCT Meter	±0.5C° ? ±0.7°/oo ?	3	Mackenzie Bay Kugmallit Bay	Plankton, Fish, Benthos, O_2, Chemical	Imperial Oil Ltd. Slaney (1976)
75-0005	AIDJEX (MAIN EXPERIMENT)	June 29, 1975-May 24, 1976	Temperature Salinity Under-Ice Currents	Plessey 9040 STD Hydro-Products TSK Profiler	±.01C° ±.01°/oo 5 cm/sec threshold ±6° direction	4	Canada Basin		Manley (1981) Thorndike & Manley (1980 a,b) Manley et al. (1980a,b,c,d)
75-0006	PANDORA II (OCEAN CHEMISTRY, I.O.S.)	Aug.2-25	Temperature	Reversing thermometers	±.01C°, ±.02C°	4	Tuktoyaktuk Continental Shelf	O_2, Nutrients	Wong et al. (1978)
			Salinity	Autolab 601 MKIII Salinometer	±.003°/oo, ±.02°/oo				

TABLE 1: SUMMARY LISTING OF DATA SETS (Cont'd)

Data Set I.D.	Ship or collecting agency	Dates of measurements	Quantity measured	Instruments or methods used ?=Unknown	Estimate of data precision and accuracy	Data rating number	Area	Concurrent measurements	Source or reference
74-0007A	THETA (ARCTIC BIOLOGICAL STATION)	July 14-Sept. 2	Temperature Salinity	Reversing thermometers Bissett-Berman 6230 Salinometer	$[\pm.02C^{o},\pm.02C^{o}]$ $[\pm.02^{o}/oo,\pm.01^{o}/oo]$	3	Tuktoyaktuk Continental Shelf	Zooplankton, O_2,Chl.A,POC, Nutrients	Grainger & Lovrity (1975)
74-0007B	ARCTIC BIOLOGICAL STATION	Dec.1	Temperature Salinity	Reversing thermometers Bissett-Berman 6230 Salinometer	$[\pm.02C^{o},\pm.03C^{o}]$ $[\pm.01^{o}/oo,\pm.02^{o}/oo]$	3	Kugmallit Bay	Zooplankton, Nutrients	Grainger & Lovrity (1975)
74-0008	THETA (OCEAN CHEMISTRY, I.O.S.)	Aug. 11-Sept. 1	Temperature Salinity	Reversing thermometers Autolab 601 MK 111 Salinometer	$\pm.01C^{o},\pm.02C^{o}$ $\pm.003^{o}/oo,\pm.02^{o}/oo$	4	Tuktoyaktuk Continental Shelf	O_2,Nutrients	Wong et al. (1978)
74-0010A	ARCTIC BIOLOGICAL STATION	Mar.1-2 May 24-25	Temperature Salinity	Reversing thermometers Bissett-Berman 6230 Salinometer	$[\pm.02C^{o},\pm.03C^{o}]$ $[\pm.01^{o}/oo,\pm.02^{o}/oo]$	3	Eskimo Lakes	O_2,Nutrients Chl.A,POC,pH, Secchi depth	Grainger et al. (1977)
74-0010B	ARCTIC BIOLOGICAL STATION	June 20	Temperature Salinity	Reversing thermometers Bissett-Berman 6230 Salinometer	$[\pm.02C^{o}/,\pm.03C^{o}]$ $[\pm.01^{o}/oo,\pm.02^{o}/oo]$	3	Eskimo Lakes	O_2,Nutrients, Chl.A,POC,pH, Secchi depth	Grainger et al. (1977)
74-0010C	ARCTIC BIOLOGICAL STATION	July 2-Aug. 23	Temperature Salinity	Reversing thermometers Bissett-Berman 6230 Salinometer	$[\pm.02C^{o},\pm.03C^{o}]$ $[\pm.01^{o}o/oo,\pm.02^{o}/oo]$	3	Eskimo Lakes	O_2,Nutrients, Chl.A,POC,pH, Secchi depth	Grainger et al. (1977)
74-0011	ARCTIC GAS	July 8 Sept. 21	Temperature Salinity	YSI Model 33 S-C-T Meter	$\pm0.3C^{o}$ $\pm.1^{o}/oo$	3	West of Herschel Island	O_2,POC,Si,pH, ice cover, snow cover	Canadian Arctic Gas (1975)
74-0019	F.F. SLANEY & CO. LTD. for SUNOCO LTD.	Feb.-Mar.	Temperature Salinity	YSI Model 33 S-C-T Meter	$\pm0.5C^{o}$? $\pm0.7^{o}/oo$?	1	East Mackenzie Bay	pH,HCO_3,O_2 turbidity, hardness, suspended solids metals	Slaney (1974)
74-0020	FRESHWATER INSTITUTE	Mar. 22-Sept.20	Temperature Salinity	Hach Kit Hach Chloride Kit Kahl 118 WA 300 Salinometer		1	Mackenzie Bay Kugmallit Bay	Fish,O_2,pH, hardness	Percy (1975) (not plotted in Section 9)

TABLE 1: SUMMARY LISTING OF DATA SETS (Cont'd)

Data Set I.D.	Ship or collecting agency	Dates of measurements	Quantity measured	Instruments or methods used ?=Unknown	Estimate of data precision and accuracy	Data rating number	Area	Concurrent measurements	Source or reference
75-0007	CANADIAN HYDROGRAPHIC SERVICE	Jan. 1-Sept.19	Bottom Currents Bottom Pressure	Aanderaa RCM4 Aanderaa TG1A, TG2A	±1 cm/sec ±10° direction	1	Herschel Is. Kugmallit Bay Tuktoyaktuk Continental Shelf		Huggett et al.(1977) Huggett et al.(1975)
75-0008	CANADIAN HYDROGRAPHIC SERVICE	July-Sept.	Water Surface Elevation	Temporary shore-based tide gauges	±1 cm,±10 cm	2	Thetis Bay Phillips Bay Mackenzie Bay Liverpool Bay McKinley Bay		Canadian Hydrographic Service
75-0009	MV THETA	Aug. 20-Sept. 9	Temperature Salinity	Reversing thermometers Bench Salinometer	[±.02C°,±.03C°] [±.01°/oo,±.02°/oo]	3	Tuktoyaktuk Cont. Shelf	Suspended Matter	Bornhold (1975)
75-0010A	ARCTIC BIOLOGICAL STATION	Feb. 28-29	Temperature Salinity	Reversing thermometers Bisset-Berman 6230 Salinometer	[±.02C°,±.03C°] [±.01°/oo,±.02°/oo]	3	Eskimo Lakes	O_2,Nutrients Chl.A,POC,pH, Secchi depth	Grainger et al. (1977)
75-0010B	ARCTIC BIOLOGICAL STATION	June 15-21	Temperature Salinity	Reversing thermometers Bisset-Berman 6230 Salinometer	[±.02C°,±.03C°] [±.01°/oo,±.02°/oo]	3	Eskimo Lakes	O_2,Nutrients Chl.A,POC,pH, Secchi depth	Grainger et al. (1977)
75-0011	IMPERIAL OIL LTD.	April 9- Sept. 29	Temperature Conductivity	Lambrecht Thermometer ?		2	Richards Is.	O_2,pH,Metals, Turbidity,SPM, Nutrients	Slaney (1976a)
75-0012	ARCTIC BIOLOGICAL STATION (HELICOPTER & PANDORA II)	April 26-May 10 & June 17-July 17	Temperature Salinity	Reversing thermometers Bissett-Berman 6230 Salinometer	[±.02C°,±.03C°] [±.01°/oo,±.02°/oo]	3	Tuktoyaktuk Continental Shelf	Zooplankton, O_2,Chl.A, Nutrients	Grainger & Lovrity (1975)
75-0024	FRESHWATER INSTITUTE	Mar.8-18	Temperature Salinity	Hach Kit Hach Chloride Kit, Kahl 118 WA 300 Salinometer		1	Mackenzie Bay Kugmallit Bay	Fish, O_2,pH hardness	Percy (1975). (not plotted in section 10).

TABLE 1: SUMMARY LISTING OF DATA SETS (Cont'd)

Data Set I.D.	Ship or collecting agency	Dates of measurements	Quantity measured	Instruments or methods used ?=Unknown	Estimate of data precision and accuracy	Data rating number	Area	Concurrent measurements	Source or reference
75-0025	DEPT. OF ENVIRONMENT FISH. & MAR. SVC.	May 5-Aug. 9	Temperature Salinity	YSI Model 43 Telethermometer YSI Model 33 SCT Meter	±0.5C° @ ±0.7°/oo @	1	Mackenzie Bay to Kay Point	Fish samples, O_2,alkalinity, pH	Kendel et al. (1975)
75-0026	NORCOR ENGINEERING AND RESEARCH LTD.	April 12-July 19	Temperature Salinity	YSI SCT Meter	±0.5C° ±0.8°/oo	3	Cape Parry	HC, phytoplankton	Norcor Engineering and Research Ltd. (1975)
75-0028	GLACIOLOGY DIV.,INLAND WATERS DIR., D.O.E.	May 24-June 25	Temperature Salinity	Hydrolabs TC-2	±.05C° ±0.5°/oo	3	Balaena Bay	Alkalinity,pH, chlorophyll, major ions,D.O., plankton	Adams (1975)
76-0001	CANADIAN MARINE DRILLING LTD.	Aug. 8-Oct.12	Temperature Salinity Sub-Surface Currents	Bathythermograph ? Hydro-Products 950, Cushing Electromagnetic	±0.1C° ±1.5 cm/sec,±11° ±4 cm/sec	2 1	Tuktoyaktuk Continental Shelf		Canadian Marine Drilling Ltd.
76-0002	CANADIAN HYDROGRAPHIC SERVICE	July 7-Sept. 10	Water Surface Elevation	Temporary Shore Based Tide Gauges	±1 cm,±10 cm	2	Eskimo Lakes Mackenzie Bay Banks Island Continental Shelf Amundsen Gulf		Canadian Hydrographic Service
76-0003	IMPERIAL OIL LTD.	Aug. 14-Sept. 7,	Temperature Salinity	YSI SCT meter	±0.5C° @ ±0.7°/oo @	3	Kugmallit Bay	O_2,Plankton, Benthos,Fish Nutrients, Alkalinity	Imperial Oil Ltd. Slaney (1977b)
76-0004	IMPERIAL OIL LTD.	July 17-Sept. 5	Temperature Salinity Current Profiles	YSI SCT Meter	±0.5C° @ ±0.7°/oo @	3	Tuktoyaktuk Continental Shelf	Turbidity	Imperial Oil Ltd. Slaney (1977a)
77-0001	FRESHWATER INST.,FISH & MAR. SVC., D.O.E., Winnipeg	July 4-Aug. 11	Temperature Salinity	Hydrolab TC-2 Conductivity Meter	±1C° @ ±1°/oo @	2	MacKenzie Bay	Turbidity	Fraker et al. (1977)

TABLE 1: SUMMARY LISTING OF DATA SETS (Cont'd)

Data Set I.D.	Ship or collecting agency	Dates of measure-ments	Quantit measured	Instruments or methods used ?=Unknown	Estimate of data precision and accuracy	Data rating number	Area	Concurrent measurements	Source or reference
77-0002	IMPERIAL OIL LTD.	July 16-Sept. 2	Temperature Salinity	? ?		2	Kugmallit Bay	Turbidity,O_2, Suspended Solids	Imperial Oil Ltd. Aquatic Environments Ltd. (1977)
77-0003	PANDORA II (OCEAN CHEMISTRY, I.O.S.)	Aug. 11-Sept.6	Temperature Salinity	Reversing Thermometers Autolab Salinometer	±01C°,±.02C° ±.003°/oo,±.02°/oo	4	Amundsen Gulf	O_2,Horizontal Plankton Tows, Nutrients, Hydrocarbons Trace Metals	Macdonald et al. (1978)
77-0004	CANADIAN MARINE DRILLING LTD.	July 10-Oct.22	Temperature Salinity Sub-Surface Currents	Hydrolab C/T Sensor Cushing Electro-Magnetic Hydro-Products 950	±1C° @ ±1°/oo @ ±4 cm/sec ±1.5 cm/sec,±11°	2 1	Tuktoyaktuk Continental Shelf		Canadian Marine Drilling Ltd.
77-0005	CANADIAN HYDROGRAPHIC SERVICE	July 5-Sept. 11	Water Surface Elevation	Temporary Shore-Based Tide Gauges	±1 cm, ±10 cm	2	Amundsen Gulf Liverpool & Mackenzie Bays		Canadian Hydrographic Service
77-0009	IMPERIAL IMMERK (IMPERIAL OIL LTD.)	July 26-Aug. 29	Temperature Salinity Current Profiles	YSI Model 33 SCT Meter Hydro Products 960S	±0.1C° ±0.7°/oo +3%	3	Tuktoyaktuk Continental Shelf.	O_2,Nutrients SPM,Chl.A, Plankton, Secchi depth	Envirocon Ltd. (1977)
78-0001	CANADIAN MARINE DRILLING LTD.	July 15-Oct. 10	Temperature Salinity Sub-Surface Currents	Hydrolab CT Sensor Hydro-Products 950	±1C° @ ±1°/oo @ ±1.5 cm/sec ±11° direction	2 1	Tuktoyaktuk Continental Shelf		Canadian Marine Drilling Ltd.
78-0002	SUPPLIER V (Canadian Marine Drilling Ltd.	July 15-18	Temperature Salinity	Applied Micro-systems CTD-12	±.06C°C ±.04°/oo	4	Tuktoyaktuk Continental Shelf	Metals, Plankton	Thomas (1978a)
78-0018	SEAKEM OCEANOGRAPHY LTD. FOR CANADIAN MARINE DRILLING	July 20	Temperature Salinity	Applied Microsystems CTD-12	±0.006C°,±0.008C° ±0.04°/oo,±0.03°/oo	4	Tuktoyaktuk Continental Shelf	Plankton, Zoobenthos, Trace Metals	Thomas (1978c)
78-0019	CANADIAN MARINE DRILLING LTD.	July 29-30	Temperature Salinity	Applied Microsystem CTD-12	±0.006C°,±0.008C° ±0.04°/oo,±0.03°/oo	2	Tuktoyaktuk Continental Shelf	Sediments,O_2 Trace Metals	Thomas (1978b) (data not catalogued-conditions artificial)

TABLE 1: SUMMARY LISTING OF DATA SETS (Cont'd)

Data Set I.D.	Ship or collecting agency	Dates of measurements	Quantity measured	Instruments or methods used ?=Unknown	Estimate of data precision and accuracy	Data rating number	Area	Concurrent measurements	Source or reference
80-0002	CANADIAN MARINE DRILLING LTD.	July 2- Oct. 3	Temperature Salinity	Hydrolabs CTD Probe, Applied Microsystems CTD-12	±0.1C° ±0.1°/oo	2	Tuktoyaktuk Continental Shelf		Canadian Marine Drilling Ltd.
80-0004	DOME PETROLEUM	July 10- Sept. 25	Temperature Salinity	Applied Micro-Systems CTD-12	±.03C° ±.04°/oo	4	Tuktoyaktuk Harbour	O_2,Metals SPM,Benthos, Transparency, Sediments	Thomas et al. (1981)
80-0016	ARCTIC LABORATORIES FOR DOME PETROLEUM LTD.	April 3- May 3	Temperature Salinity	Thermistor YSI SCT Meter	±0.5C°? --	1 0	McKinley Bay	DO, Fluorometry	Arctic Labs (1980)
81-0001	INSTITUTE OF OF OCEAN SCIENCES (FROZEN SEA RESEARCH GROUP)	March 18- April 17, March 23- Aug. 16	Temperature Salinity Sub-surface Currents, Temperature, Salinity	Guildline 8706 87102 CTD Aanderaa RCM 4	±.001C°, ±.003°C ±.001°/oo, ±.01°/oo ±1 cm/sec ±10° direction	2 2	Canada Basin, Tuktoyaktuk Continental Shelf		Frozen Sea Research Group, Institute of Ocean Sciences
81-0002C	CANADIAN MARINE DRILLING LTD.	Jan. 18- Aug. 4.	Sub-surface Currents, Temperature, Salinity	Aanderaa RCM 4	±1 cm/sec ±10° direction	4	Tuktoyaktuk Continental Shelf		Canadian Marine Drilling Ltd.
81-0006	CANADIAN MARINE DRILLING LTD.	April	Under-Ice Currents	Drifting Buoy Carrying Aanderaa RCM-4	±1 cm/sec ±10° direction (relative)	2	Canada Basin		Canadian Marine Drilling Ltd. (Dome Petroleum Ltd.)
81-0013	ARCTIC LABORATORIES for DEPT. OF LOCAL GOVERNMENT, N.W.T.	June 21- July 7	Temperature Salinity	Applied Micro-Systems CTD-12	±.03C°,±.01C° ±.04°/oo,±.03°/oo	4	Tuktoyaktuk Harbour	SPM, DO	Arctic Labs (1981)
81-0015	ARCTIC LABORATORIES LTD. FOR ARCTIC BIOLOGICAL STN.	May 15- Sept.25	Temperature Salinity	Applied Microsystems CTD-12		0	Tuktoyaktuk Continental Shelf	Plankton, Nutrients O_2	Pett et al. (1981)
81-0016	ARCTIC SCIENCES LTD. FOR ESSO RESOURCES CANADA LTD.	Aug.8- Sept.26	Sub-surface currents Temperature	Endeco 105 & Aanderaa RCM 4	±2.6cm/sec,±5.4cm/sec ±1°,±7° ±1cm/sec,or 2%,±10° ±0.02C°, ±0.15C°	3	Tuktoyaktuk Continental Shelf		Birch & Fissel(1982)

TABLE I: SUMMARY LISTING OF DATA SETS (Cont'd)

Data Set I.D.	Ship or collecting agency	Dates of measurements	Quantity measured	Instruments or methods used ?=Unknown	Estimate of data precision and accuracy	Data rating number	Area	Concurrent measurements	Source or reference
79-0001	INSTITUTE OF OCEAN SCIENCES (FROZEN SEA RESEARCH GROUP)	Nov.25-30	Temperature Salinity	Guildline Model 8706-87102 CTD	±.005C° ±.005°/oo,±.01°/oo	4	Canada Basin		Frozen Sea Research Group, Institute of Ocean Sciences
79-0002	CANADIAN MARINE DRILLING LTD., U.S. COAST GUARD	Aug.13-Oct. 15	Surface Drift	Satellite-Tracked Drogued Drifters(Argos)	±1.2 km position	4	Canada Basin		Canadian Marine Drilling Ltd. U.S.Coast Guard R&D Centre
79-0003	CANADIAN MARINE DRILLING LTD.	July 13-Oct.21	Temperature Salinity	Hydrolab CT Sensor	±1C° θ ±1°/oo θ	2	Tuktoyaktuk Continental Shelf		Canadian Marine Drilling Ltd.
			Sub-Surface Currents	Hydro-Products 950 Marsh-McBirney	±1.5 cm/s,±11° ±4 cm/s	1			
79-0004	CANADIAN MARINE DRILLING LTD.	Nov.27-Dec.16	Under-Ice Currents	Drifting Buoy Carrying Aanderaa RCM 4	±1 cm/sec ±10° direction (relative)	3	Tuktoyaktuk Continental Shelf		Canadian Marine Drilling Ltd.
79-0005	ARCTIC HOOPER (CANADIAN MARINE DRILLING LTD.)	May 21-Sept. 19	Temperature Salinity	Applied Micro-systems CTD-12	±.04C° ±.08°/oo	4	Amundsen Gulf (Summer's Harbour)	Metals,COD, SPM	Thomas (1979a)
79-0007	CANMAR SUPPLIER (CANADIAN MARINE DRILLING LTD.)	July 22	Temperature Salinity	Applied Micro-systems CTD-12	±.04C° ±.04°/oo	4	Tuktoyaktuk Continental Shelf	Metals	Thomas (1979b)
79-0010	CANADIAN MARINE DRILLING LTD.	Sept. 25-27	Temperature Salinity	Applied Micro-systems CTD-12	±.04C° ±.09°/oo	3	McKinley Bay	O_2,SPM,pH, Transparency	Thomas (1979c)
80-0001	CANADIAN MARINE DRILLING LTD.	Aug.13-Oct.24	Surface Drift	Satellite-Tracked Drogued Drifters (Argos)	±1.2 km position	4	Tuktoyaktuk Continental Shelf		Canadian Marine Drilling Ltd.

TABLE 1: SUMMARY LISTING OF DATA SETS (Cont'd)

Data Set I.D.	Ship or collecting agency	Dates of measurements	Quantity measured	Instruments or methods used ?=Unknown	Estimate of data precision and accuracy	Data rating number	Area	Concurrent measurements	Source or reference
81-0017	CANADIAN HYDROGRAPHIC SERVICE	July 17-Sept. 5	Water Surface Elevation	Temporary Shore-based tide gauges	±1 cm	2	Tuktoyaktuk Continental Shelf		Canadian Hydrographic Service
81-0018	ARCTIC LABORATORIES FOR DOME PETROLEUM	Sept.11, 22.	Salinity	?		2	Tuktoyaktuk Continental Shelf		(Data proprietary-no further details available)

9. MAPS

The maps following show the measurement locations in each data set for the years 1950 to 1981. There are two standard base maps, both in Lambert Conformal Conic projection, with standard parallels of 71°N and 73°N. The map showing the entire area is at a scale of 1:4 680 000. The nearshore area from Herschel Island to Franklin Bay is shown in greater detail on the second map at a scale of 1:2 706 000. In both cases, the shorelines have been smoothed and small islands deleted for clarity.

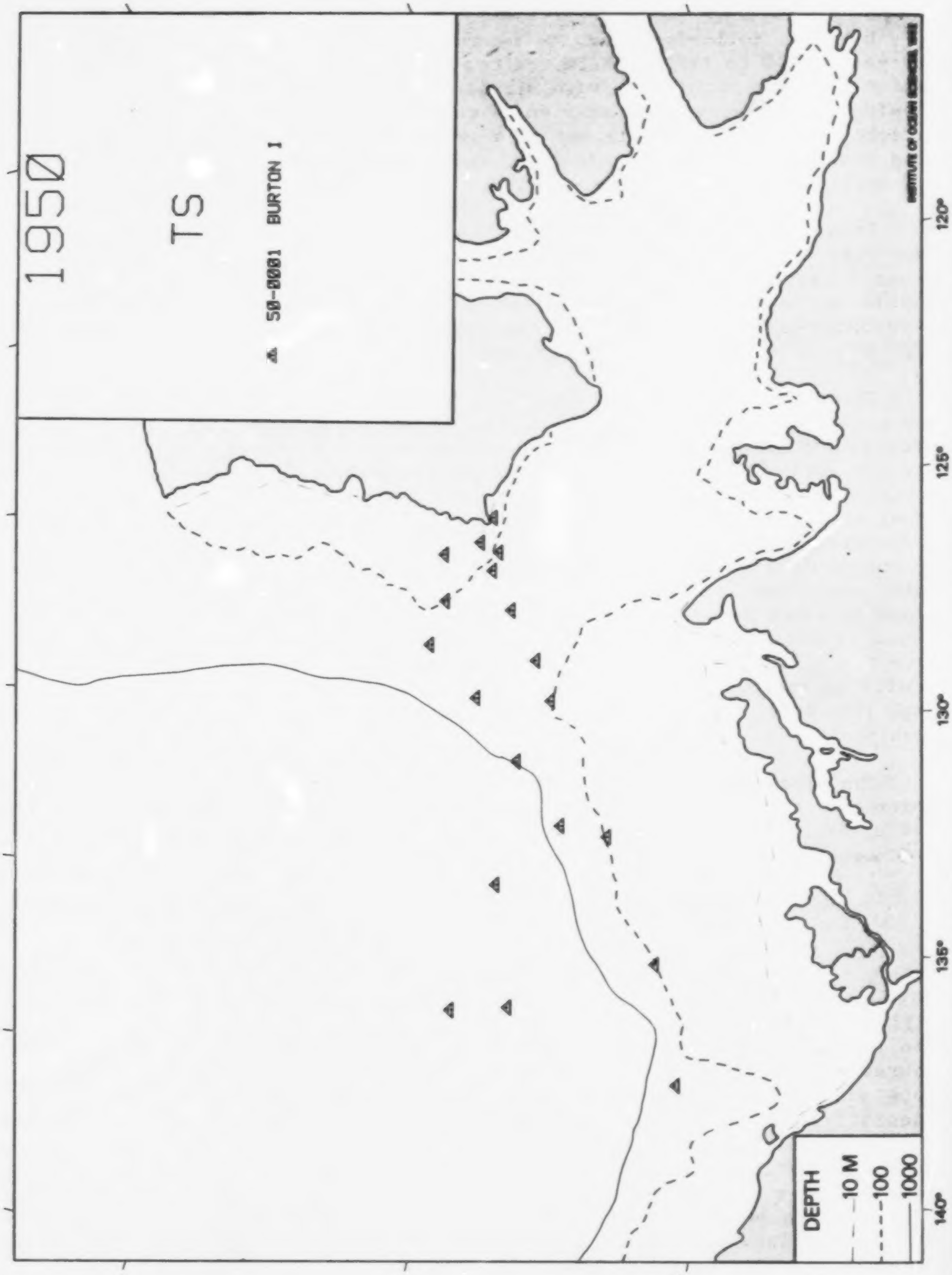
Transparent overlays with latitude and longitude grids appropriate for each base map will aid coordinate measurement and are found inside the back cover. Overlays which may be used for two different base maps will have double numbering for the coordinates. Some overlays may be labelled for alternate base maps which do not appear in this particular report; the alternate labellings should be ignored.

There are two series of maps, one showing temperature-salinity data, and the second showing water level, current meter and drifter data. The maps are arranged in yearly sequence, with all the maps for one year together. Maps are not included for years in which no data were collected. Several years occurred in which no current meter or drifter data were collected, but water level and temperature-salinity data were. The water level data appear on the temperature-salinity maps in those cases, rather than on a separate map. One or two whole-area (1:4 680 000) maps therefore appear for every year in which data were taken. Frequently, significant quantities of data were collected close to shore between Herschel Island and Cape Bathurst. That area is then shown in detail (at 1: 2 706 000 scale) in a second map following the whole area map. Therefore, for each year with data there may be as few as 1 map (T-S with or without water level data on the whole-area map) or as many as four maps (T-S data at both scales, current meter, water level and drifter data at both scales).

The maps appear with TS data on the whole area map first, followed by TS nearshore, current meter, water level and drifter data on the whole-area map and again on the nearshore map. The legend box on each map identifies the year and classes of data shown as follows:

TS: temperature-salinity data
CM: current meter data
WL: water level data
DRF: drifter data

Measurement locations are shown by symbols plotted on the maps, with a different symbol for each data set. A detailed legend identifies the symbols. The symbols are grouped by data type, with the data set number and an abbreviated form of the ship or collecting agency name listed for each one. Note that symbols are not carried over from map to map; any symbol identification applies only to the maps beside which it appears. Drifter tracks are generally represented by symbols connected with lines, however where many drifters were released and tracked in groups, the area of coverage is shown by a shaded boundary. Similarly, if many measurements of another type were taken within an area, the area will be shaded, rather than have multiple points plotted on it. Shaded areas are always identified in the legends.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TS
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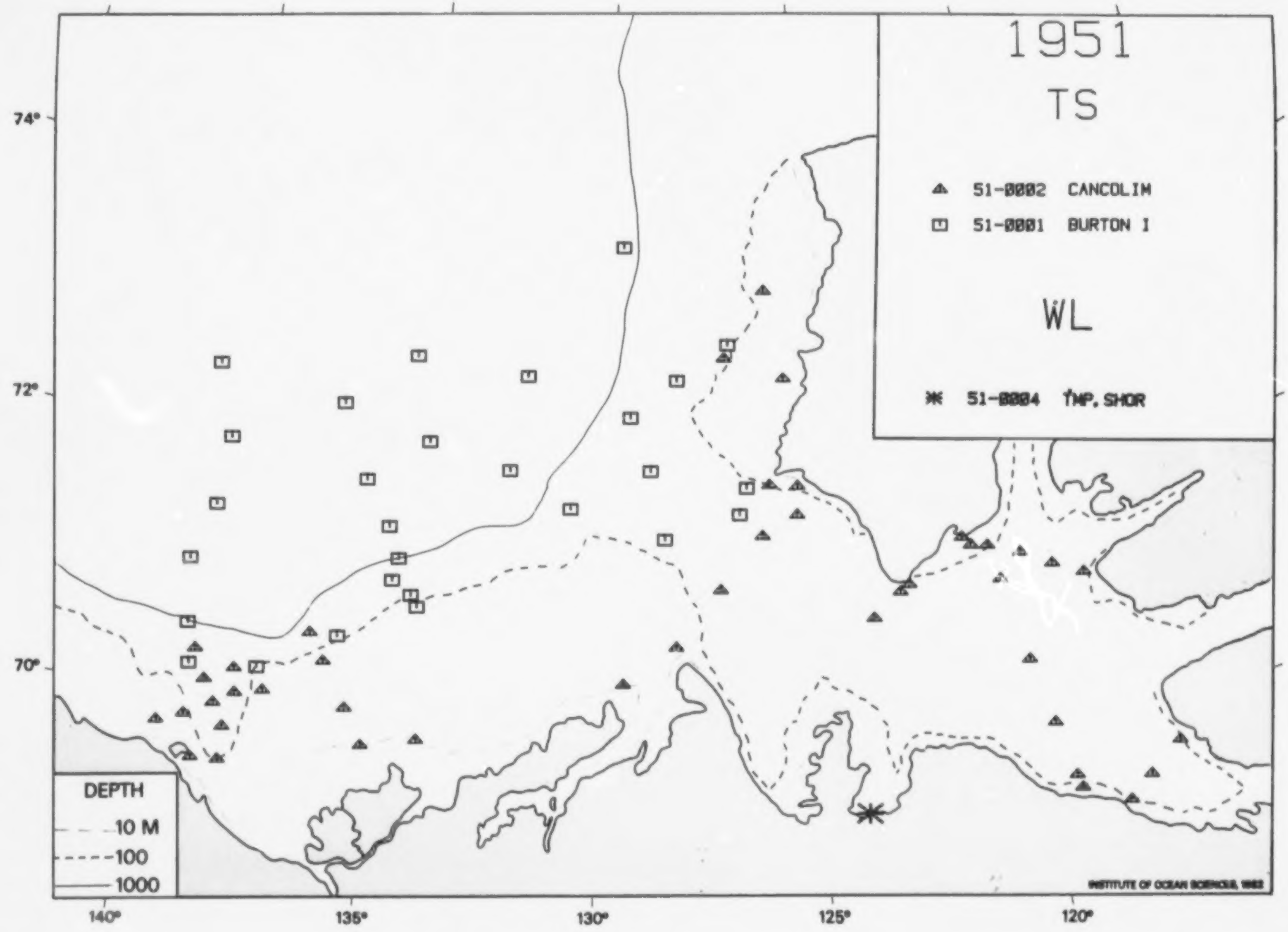
DEPTH
10 M
100
1000
74°
72°
70°
120°
125°
130°
135°
140°
INSTITUTE OF OCEAN SCIENCES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TS
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☐ 51-0001 BURTON I
WL
✳ 51-0004 TMP.SHOR
DEPTH
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1000
74°
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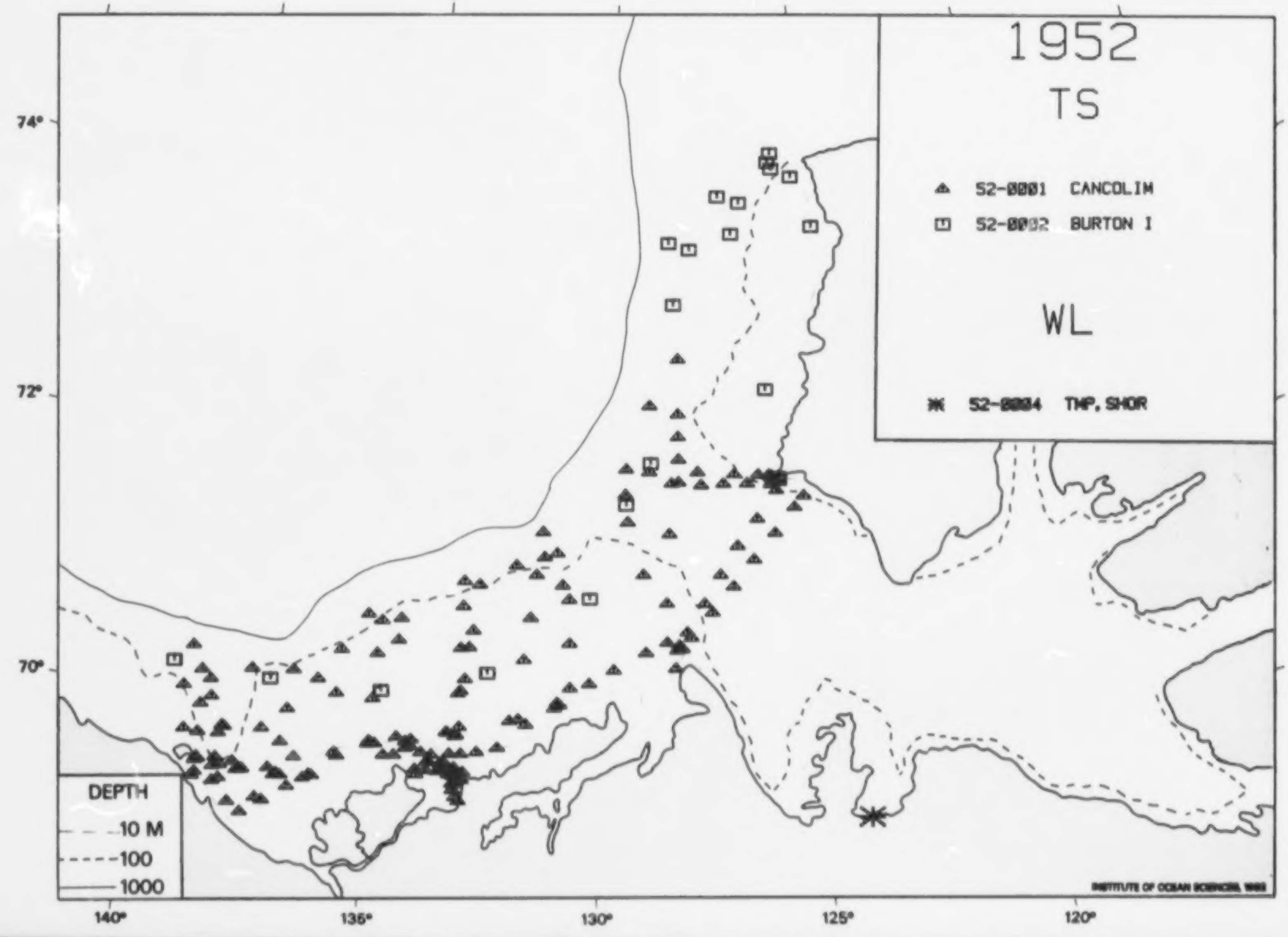
70°
140°
135°
130°
125°
120°
INSTITUTE OF OCEAN SCIENCES, 1983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TS
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⊡ 52-0002 BURTON I
WL
✱ 52-0004 TMP.SHOR
DEPTH
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1000
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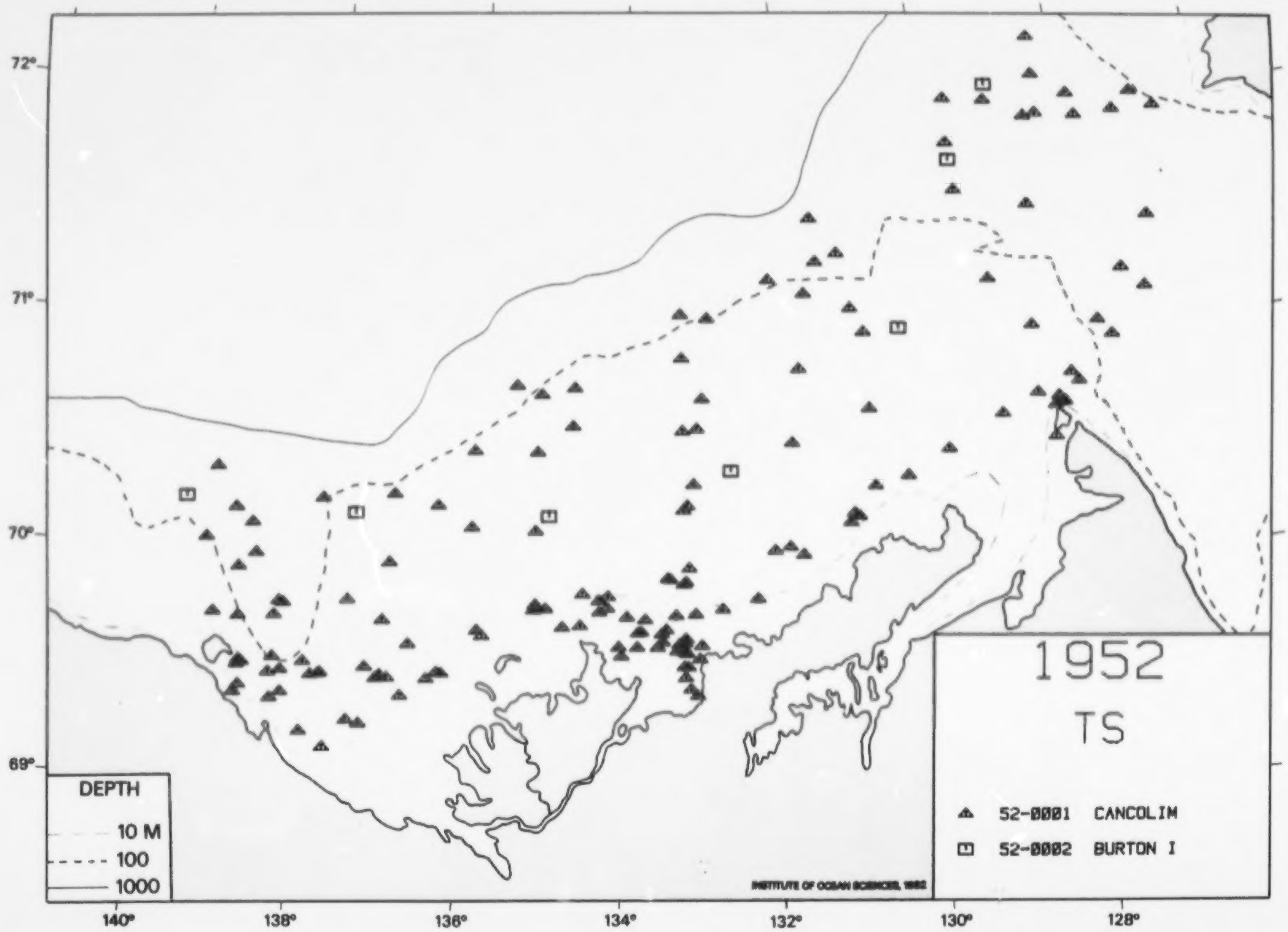
70°
140°
135°
130°
125°
120°
INSTITUTE OF OCEAN SCIENCES,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TS
52-0001 CANCOLIM
52-0002 BURTON I
DEPTH
10 M
100
1000
INSTITUTE OF OCEAN SCIENCES, 1982
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71°
70°
69°
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138°
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132°
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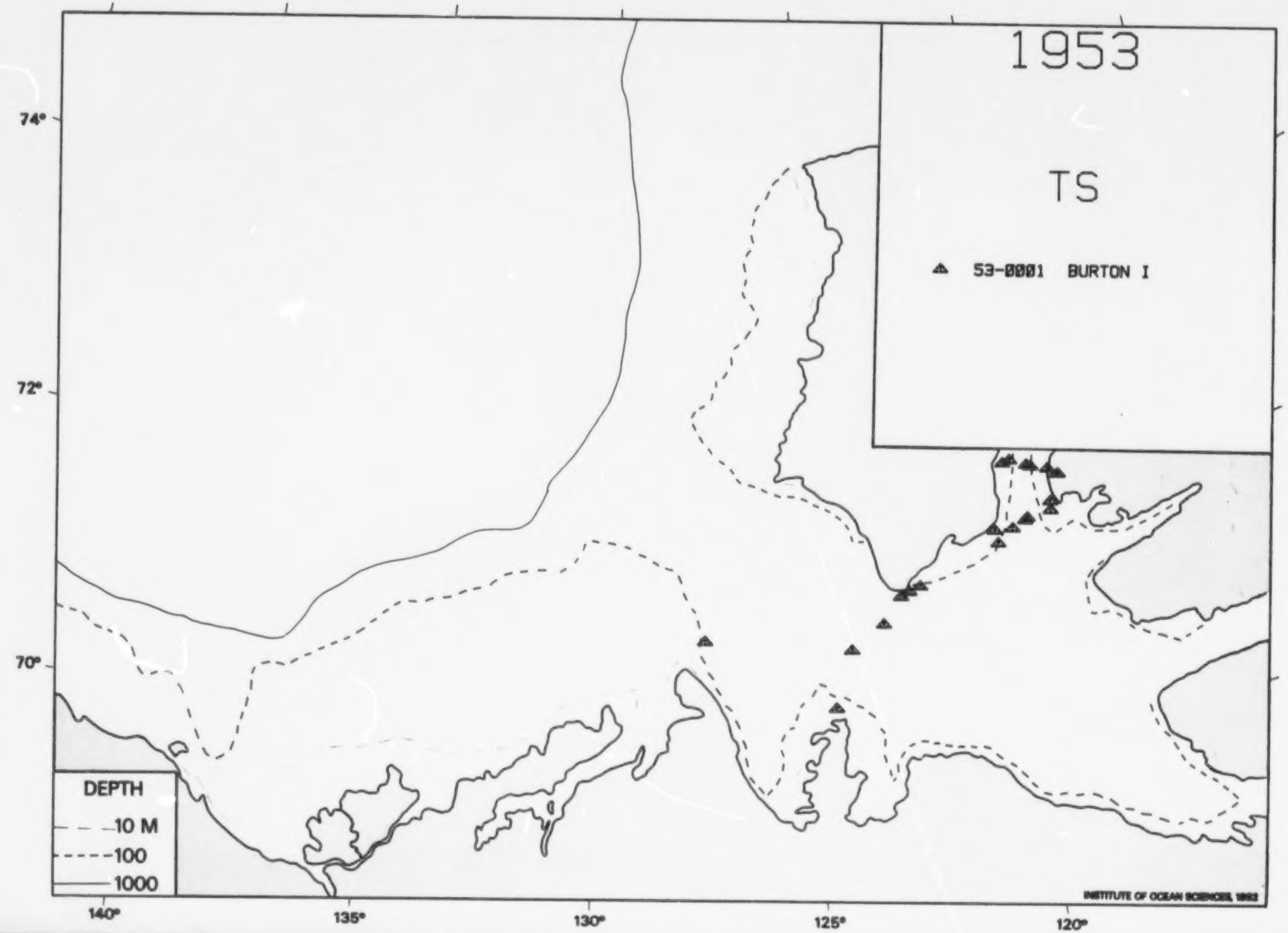
128°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TS
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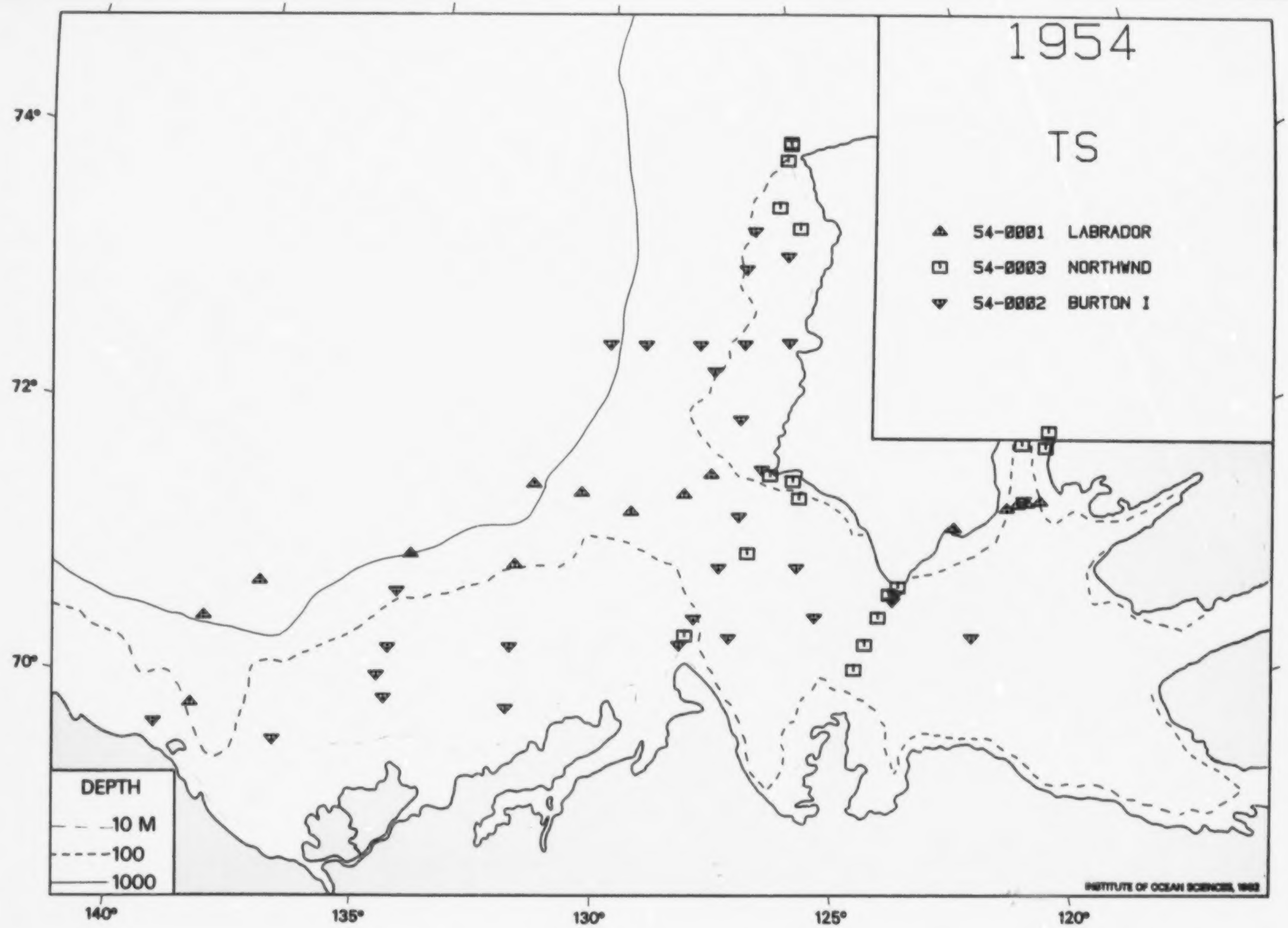
INSTITUTE OF OCEAN SCIENCES, 1982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TS
54-0001 LABRADOR
54-0003 NORTHWND
54-0002 BURTON I
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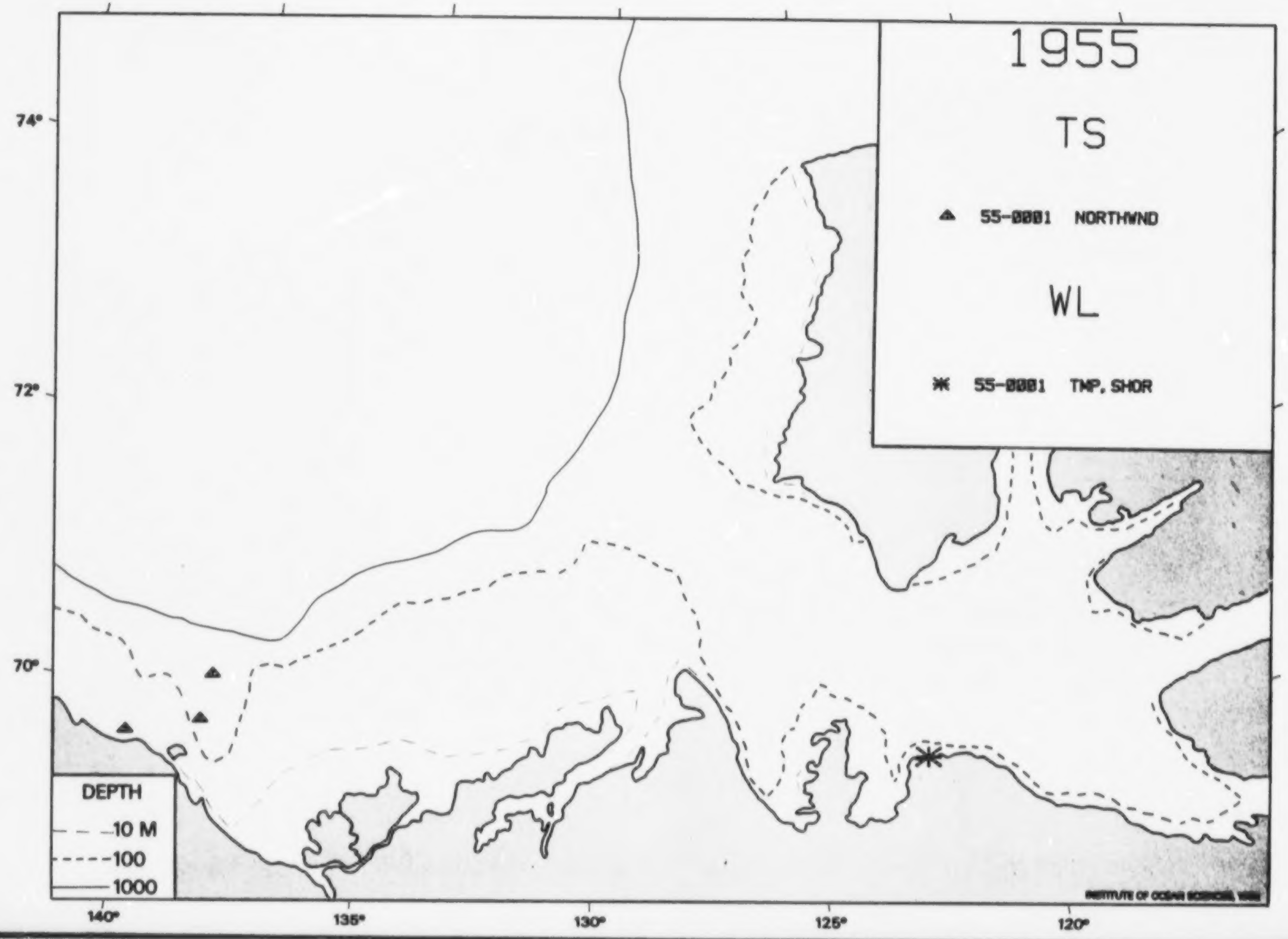
130°
125°
120°
INSTITUTE OF OCEAN SCIENCES, 1982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TS
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WL
✳ 55-0001 TMP, SHOR
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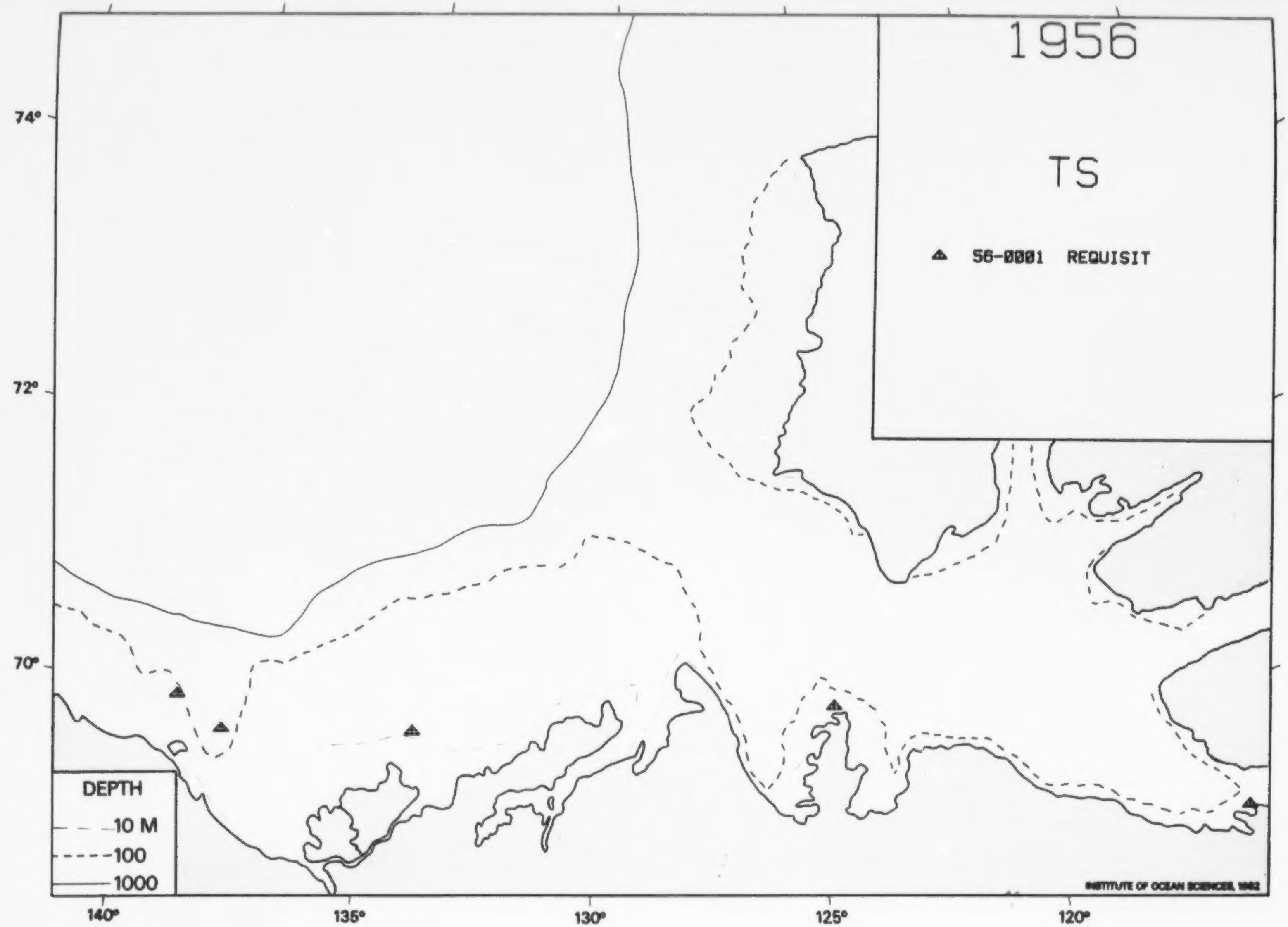
72°
70°
140°
135°
130°
125°
120°
DEPTH
10 M
100
1000
INSTITUTE OF OCEAN SCIENCES,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TS
▲ 56-0001 REQUISIT
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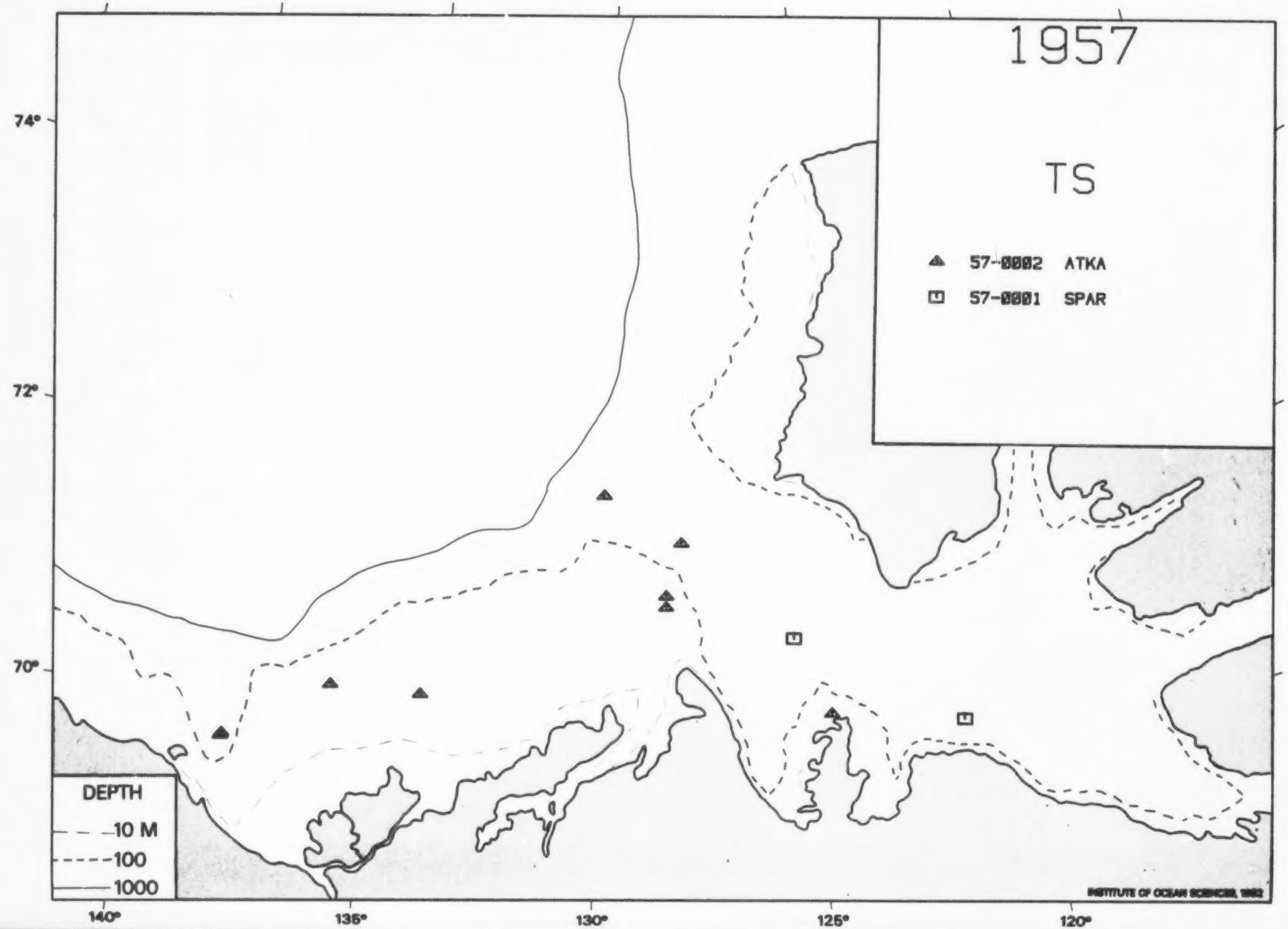
INSTITUTE OF OCEAN SCIENCES, 1982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TS
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⊡ 57-0001 SPAR
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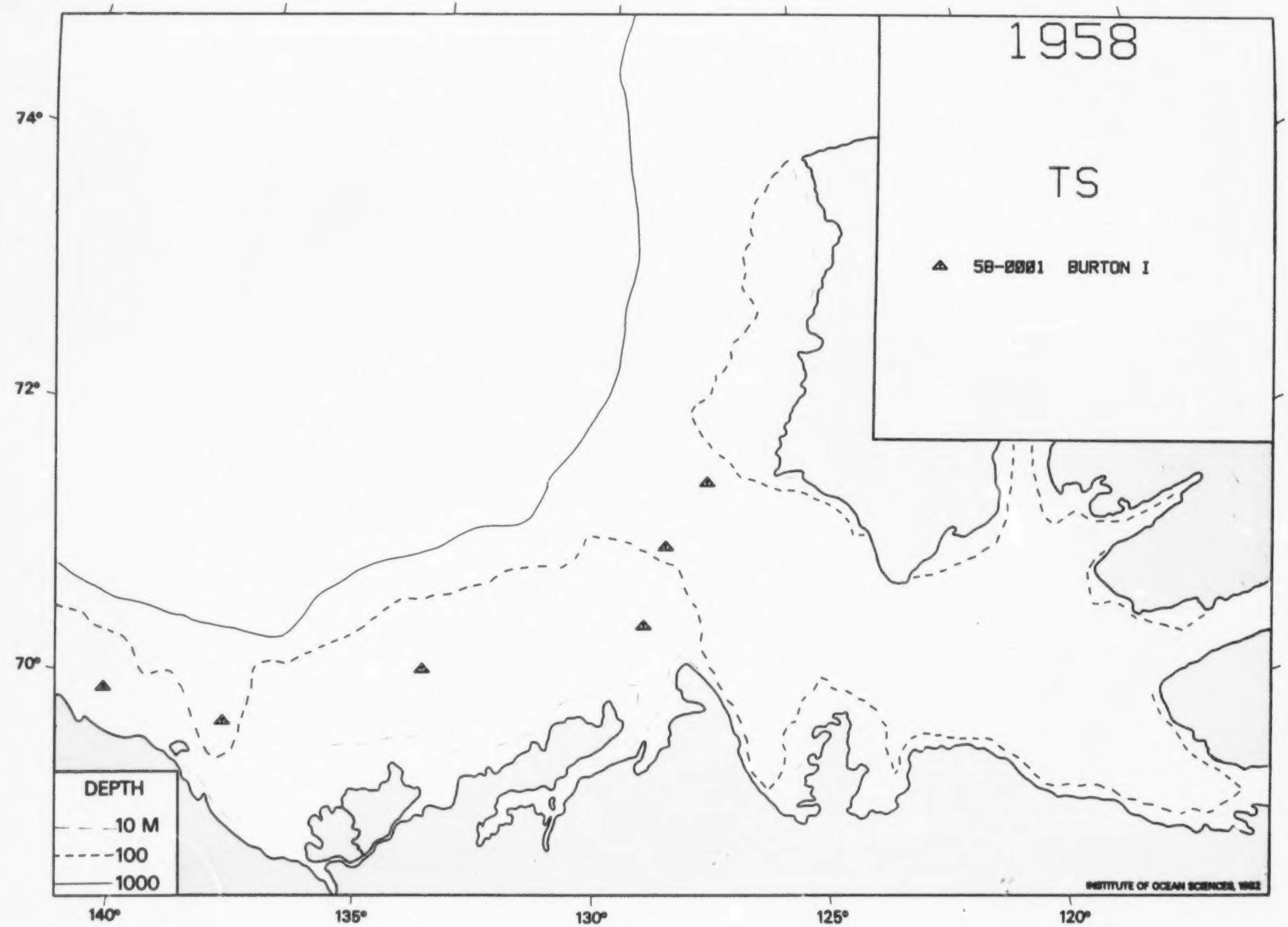
1000
INSTITUTE OF OCEAN SCIENCES, 1982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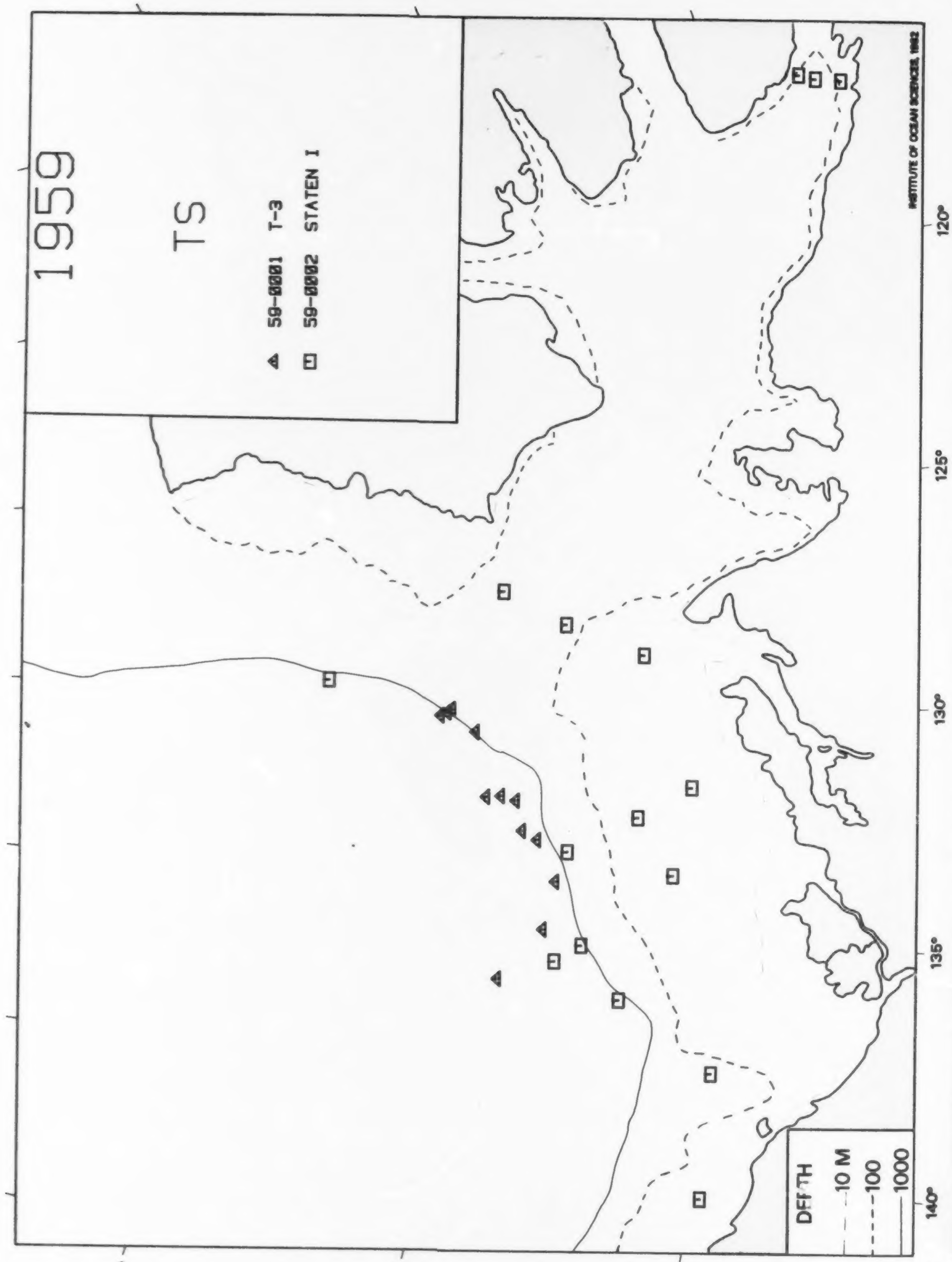
INSTITUTE OF OCEAN SCIENCES, 1982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TS
59-0001 T-3
59-0002 STATEN I
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125°
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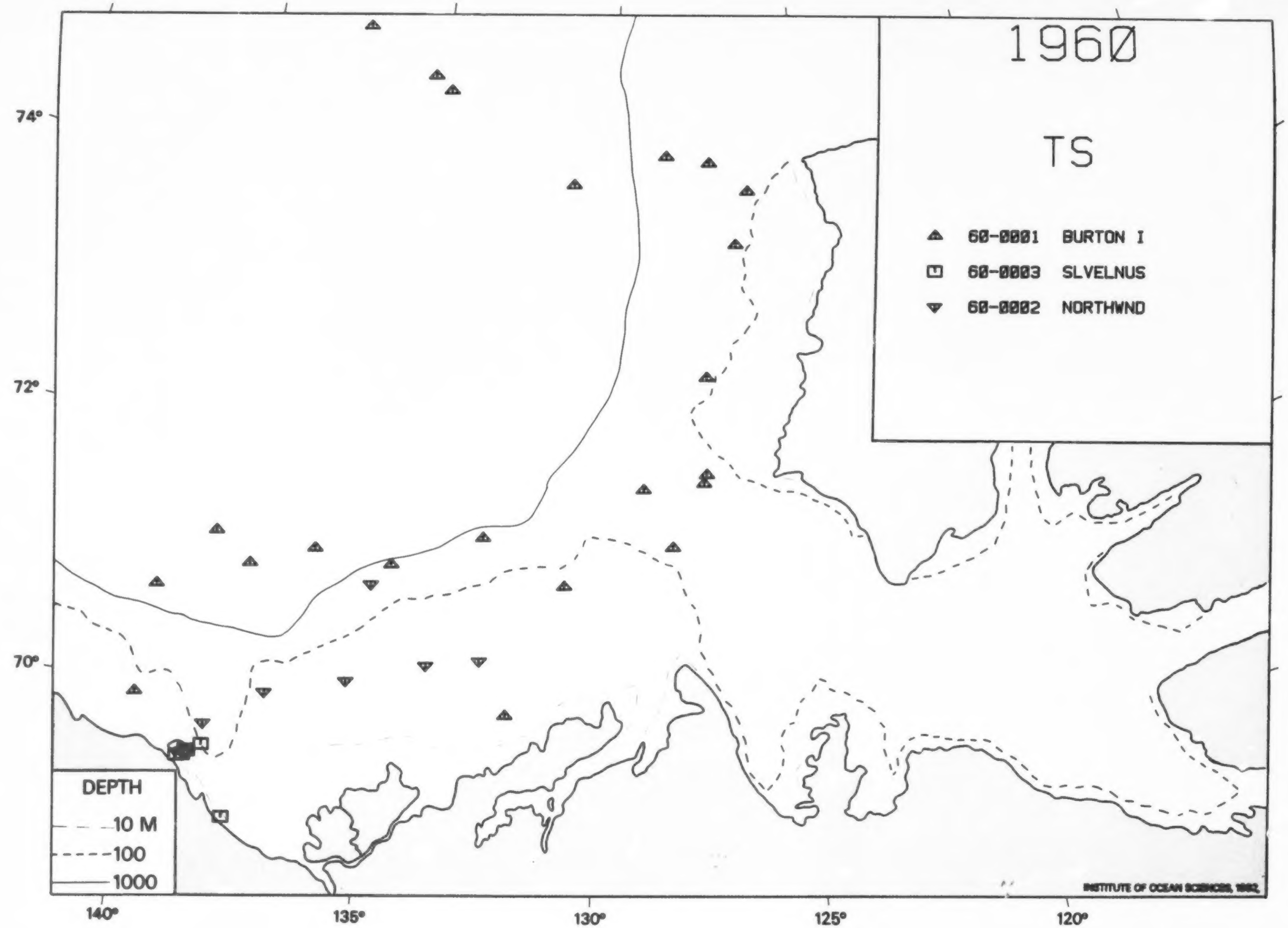
INSTITUTE OF OCEAN SCIENCES, 1982


1960
TS
▲ 60-0001 BURTON I
☐ 60-0003 SLVELNUS
▼ 60-0002 NORTHWND
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125°
120°
DEPTH
10 M
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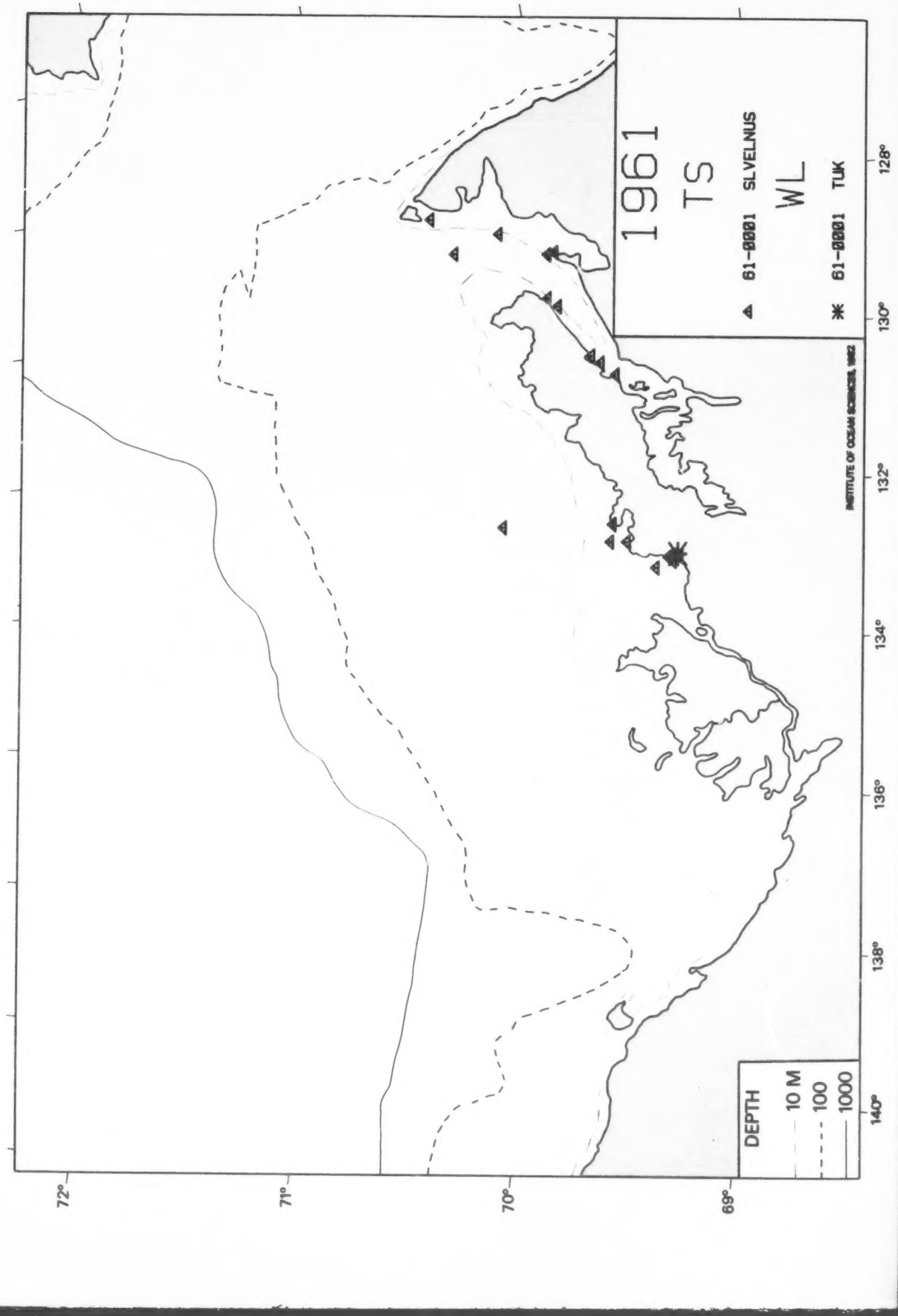
1000
INSTITUTE OF OCEAN SCIENCES, 1982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TS
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WL
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INSTITUTE OF OCEAN SCIENCES, 1982
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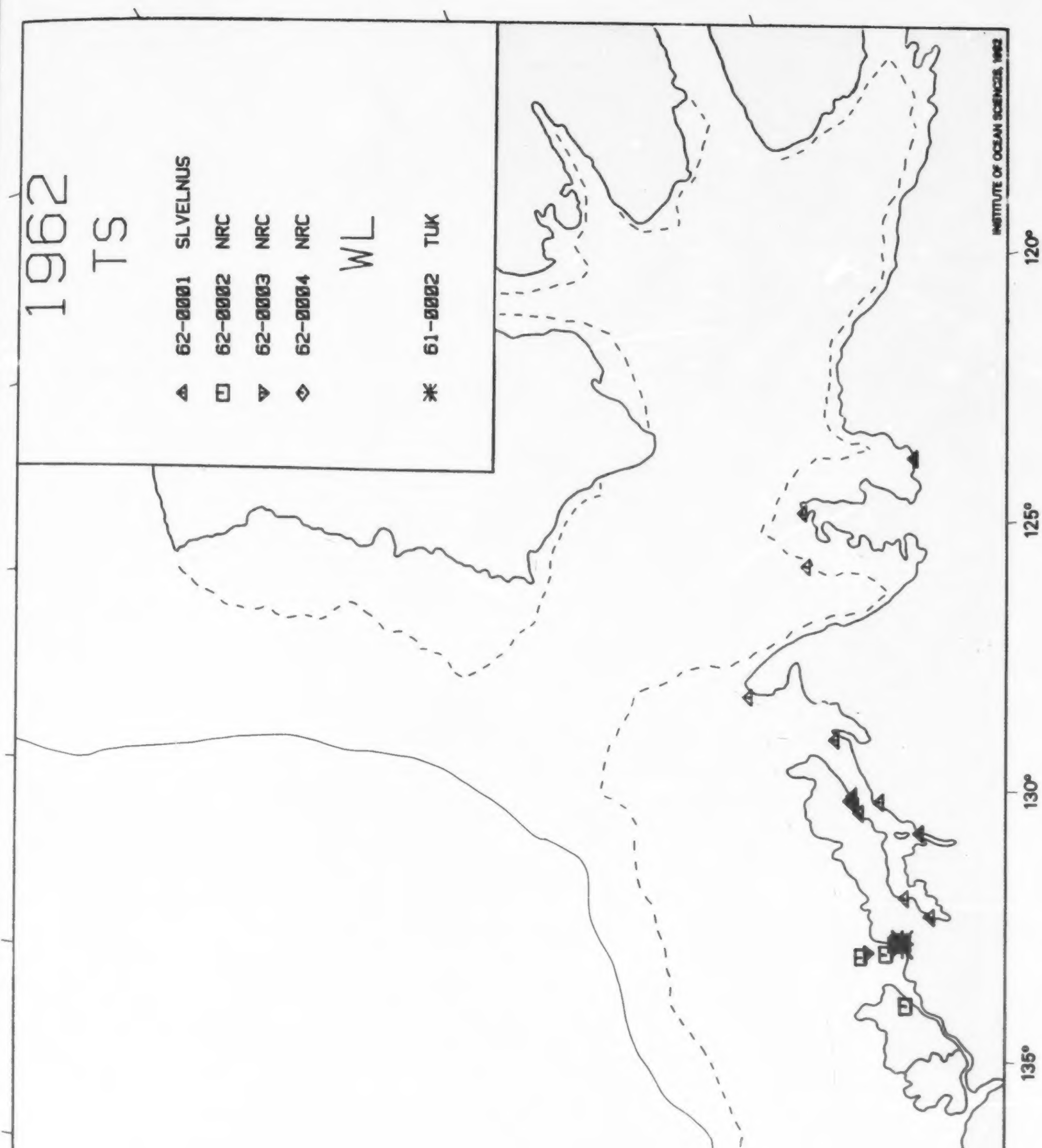
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▽ 62-0003 NRC
◇ 62-0004 NRC
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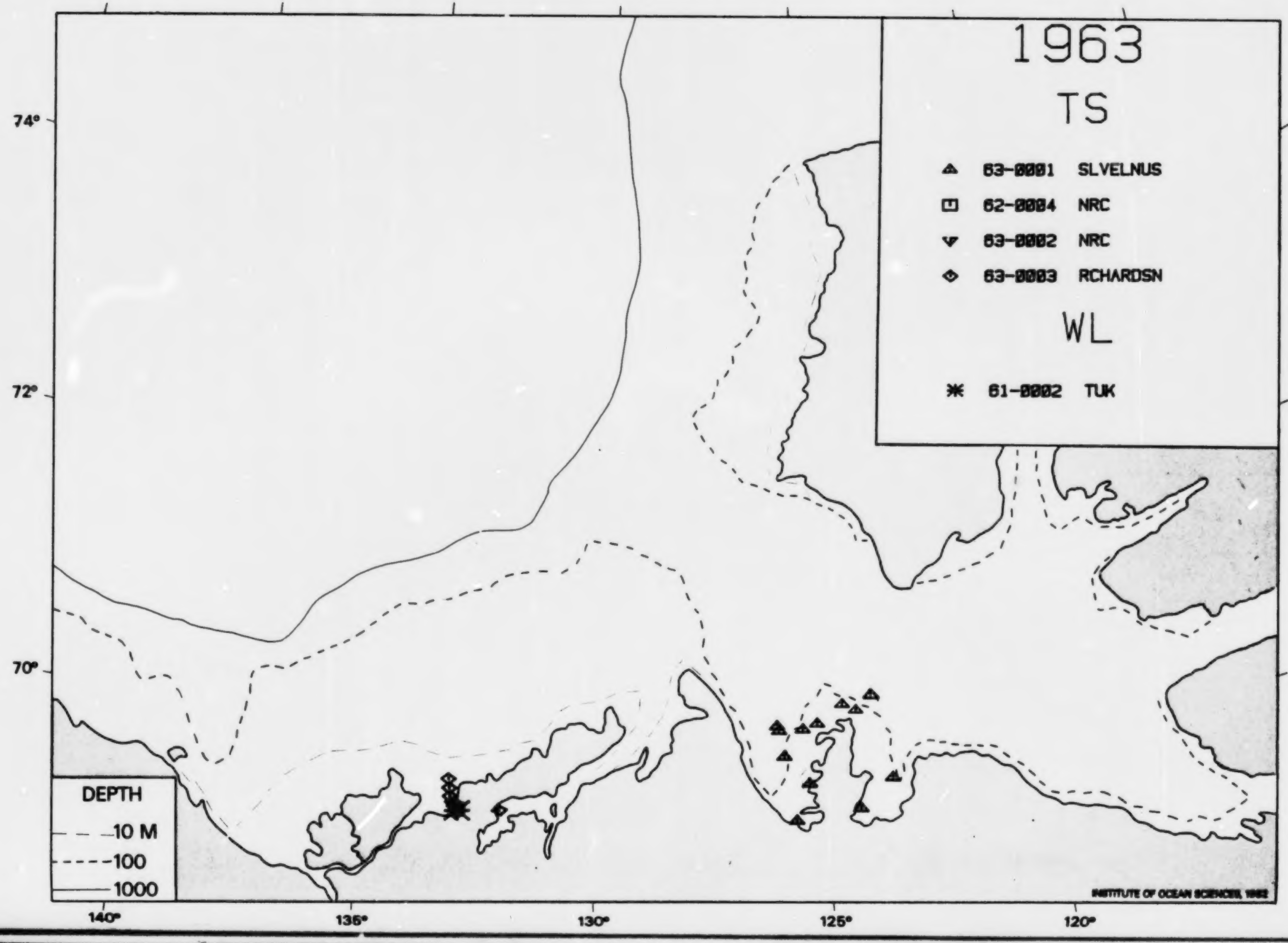
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WL
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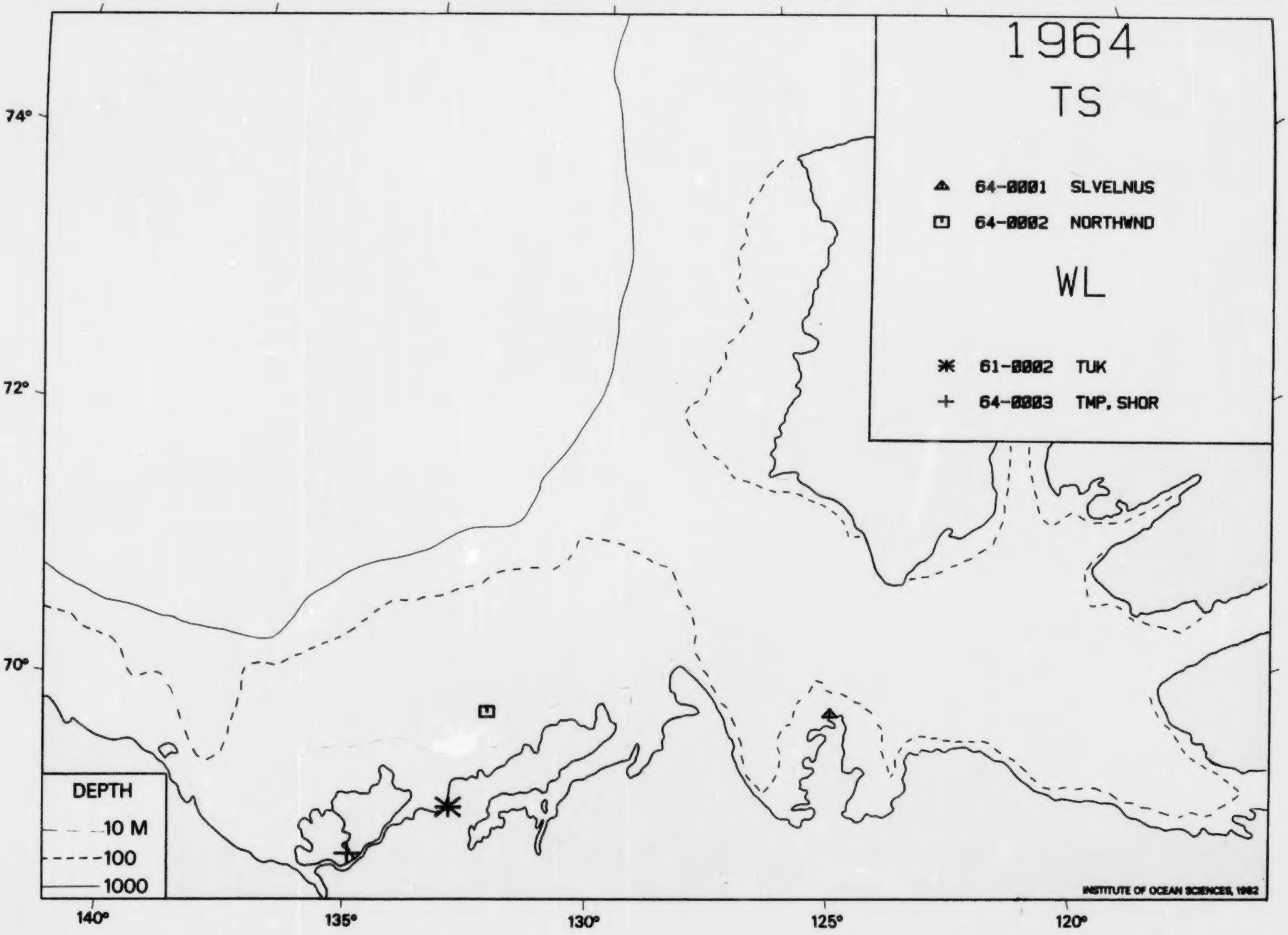
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WL
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DEPTH
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INSTITUTE OF OCEAN SCIENCES, 1982
74°
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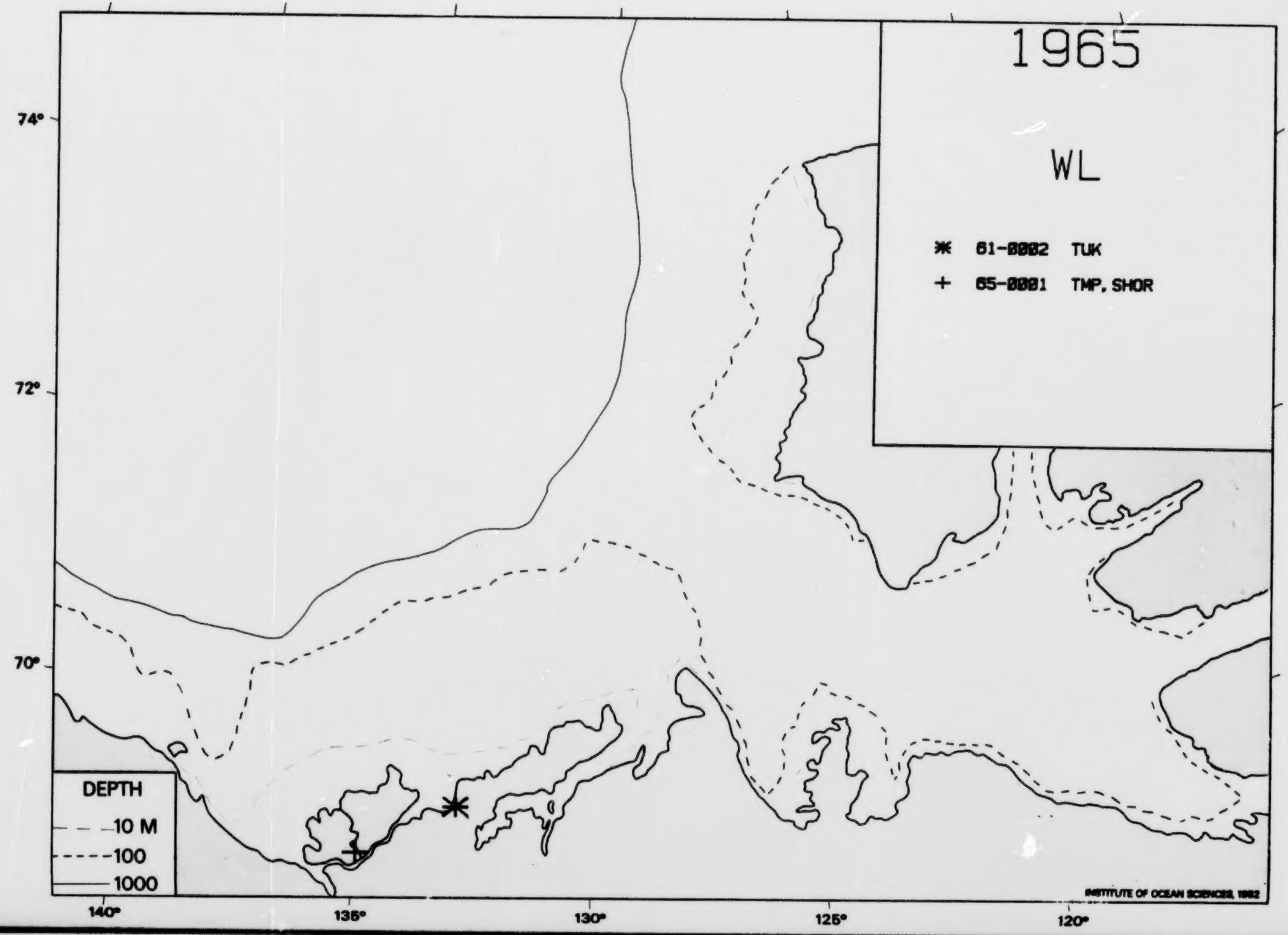
120°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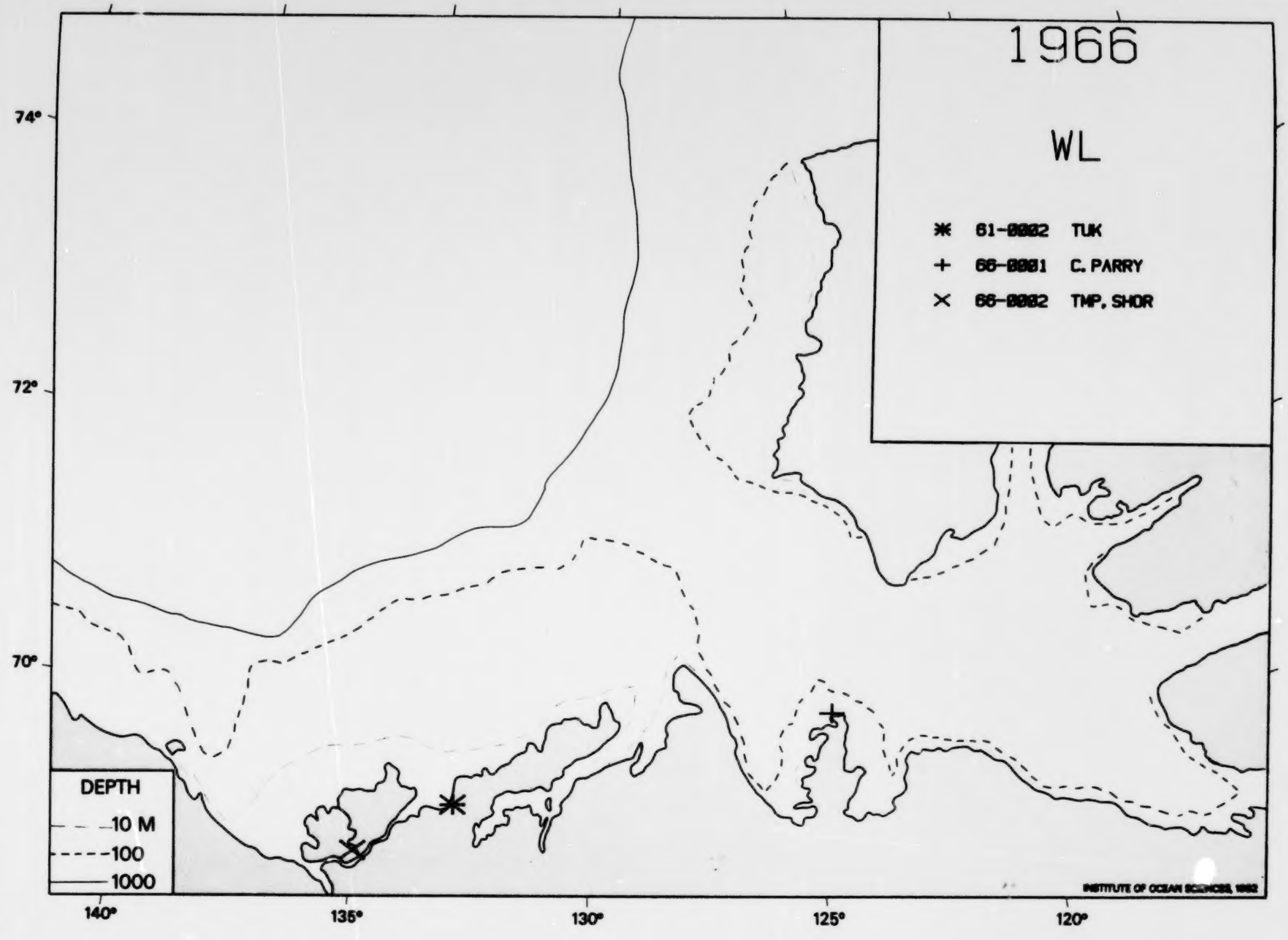
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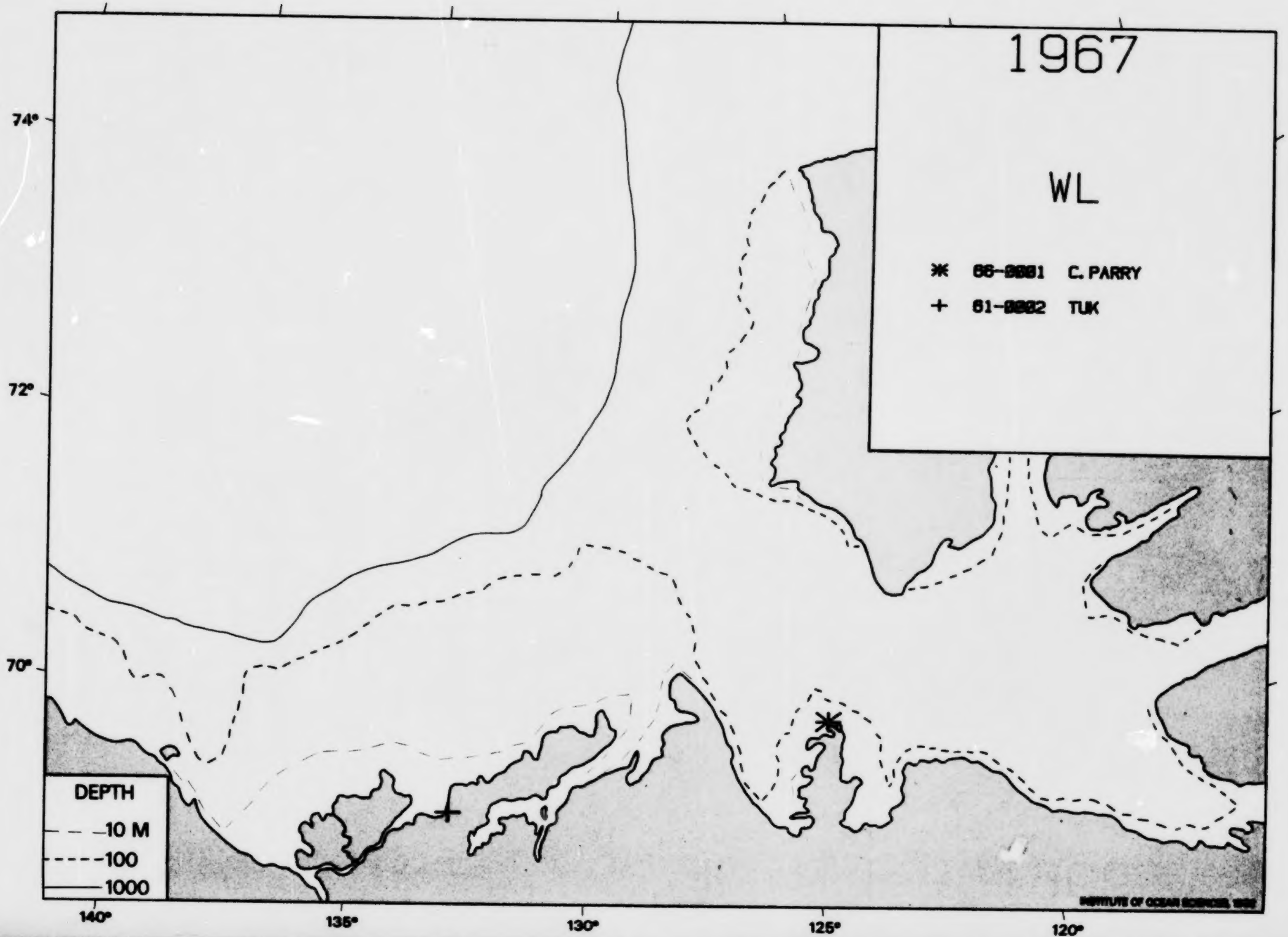
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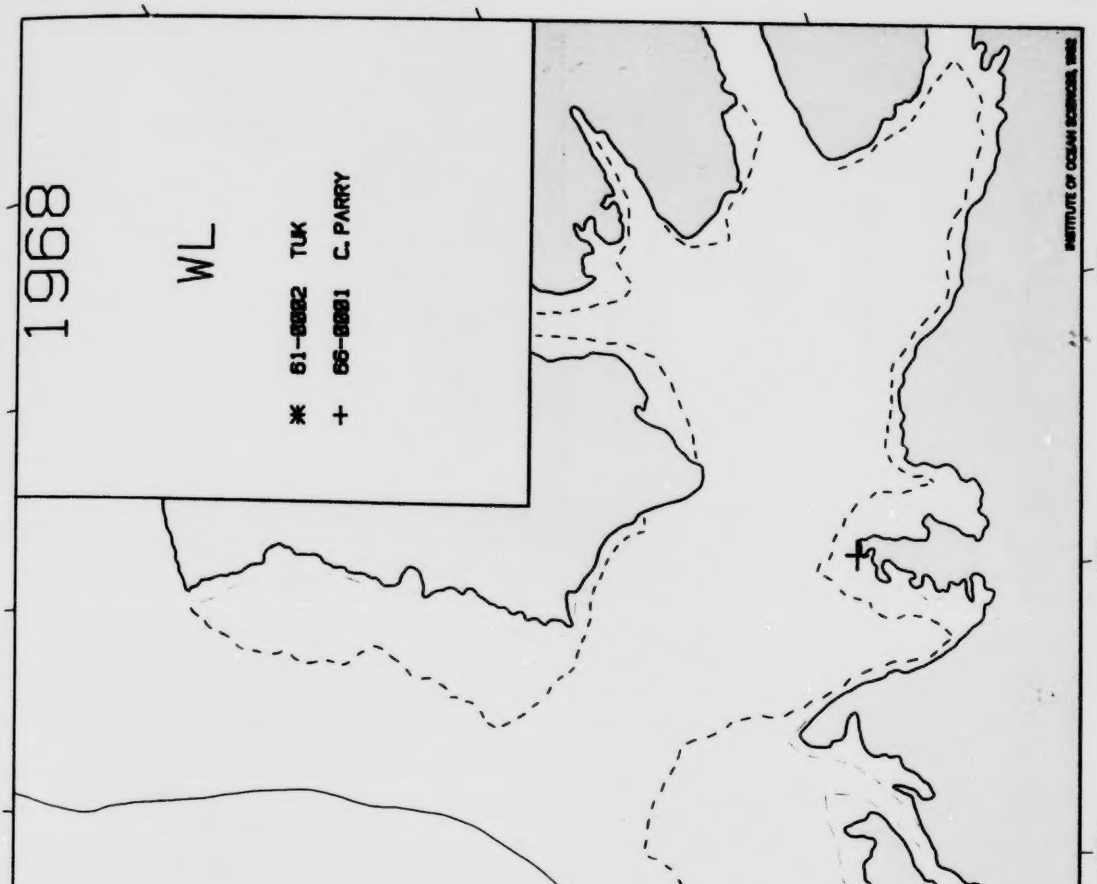
1968
WL
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DEPTH
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INSTITUTE OF OCEAN SCIENCES, 1992
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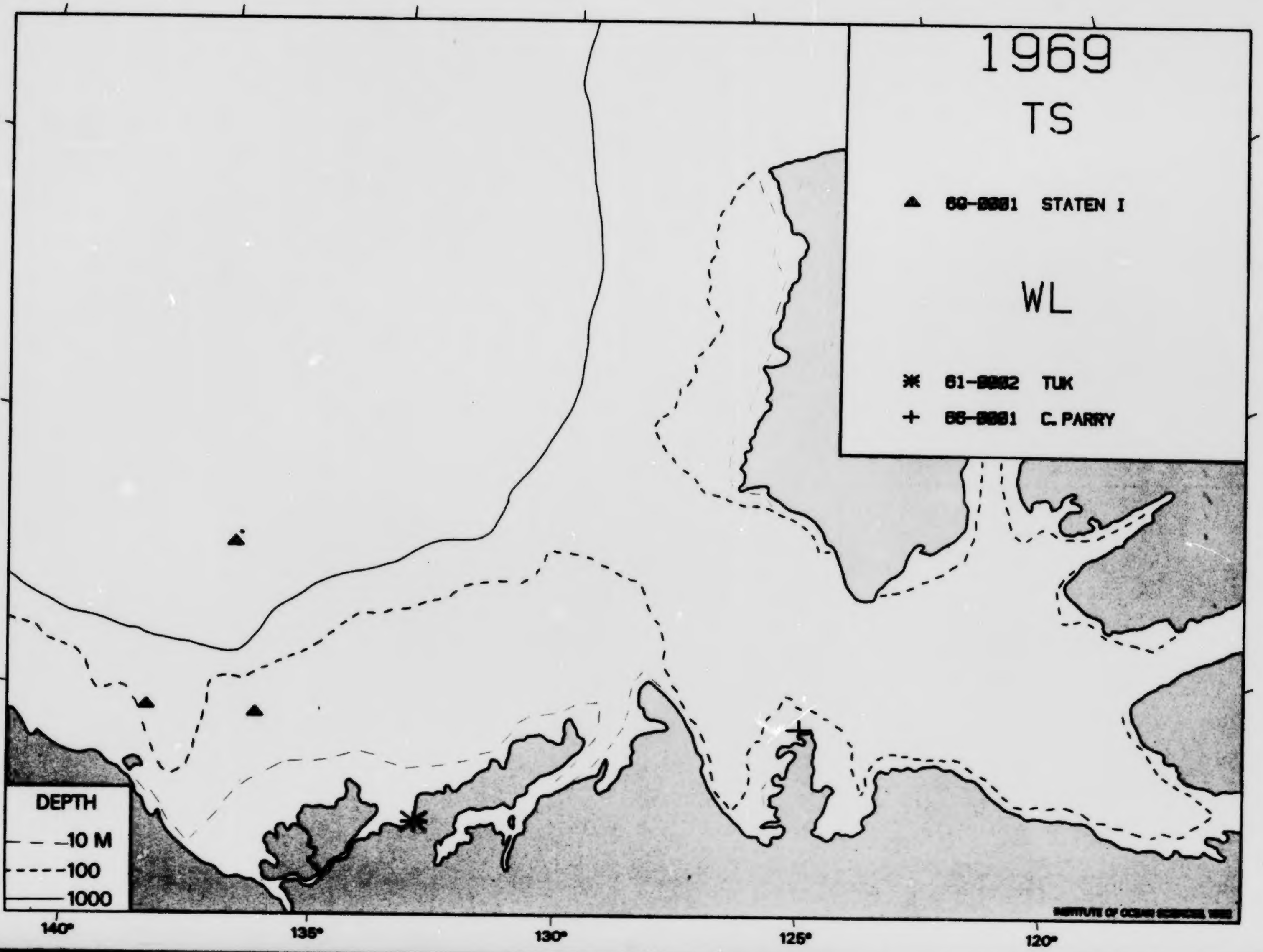
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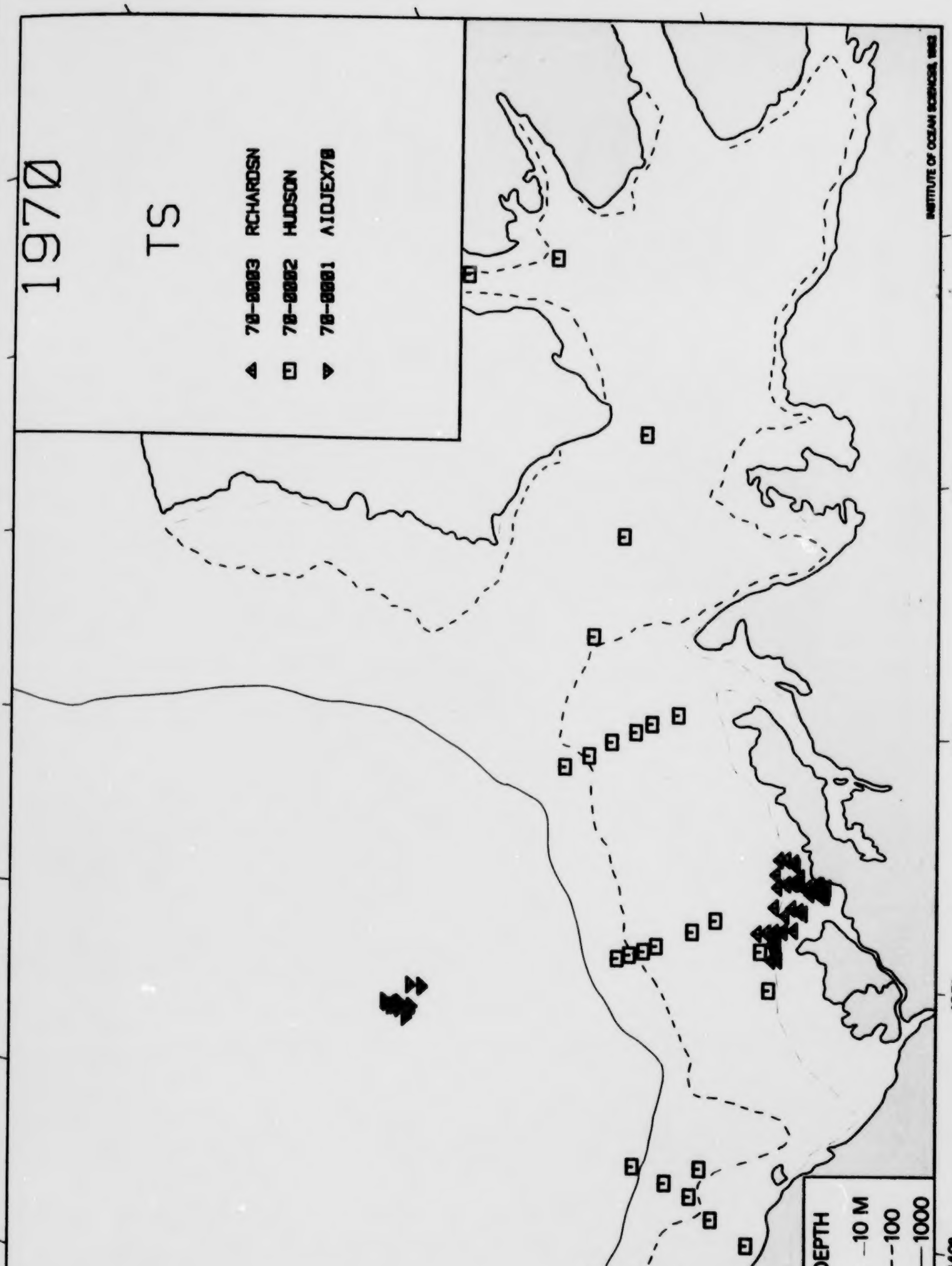
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TS
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70-0002 HUDSON
70-0001 AIDJEX70
DEPTH
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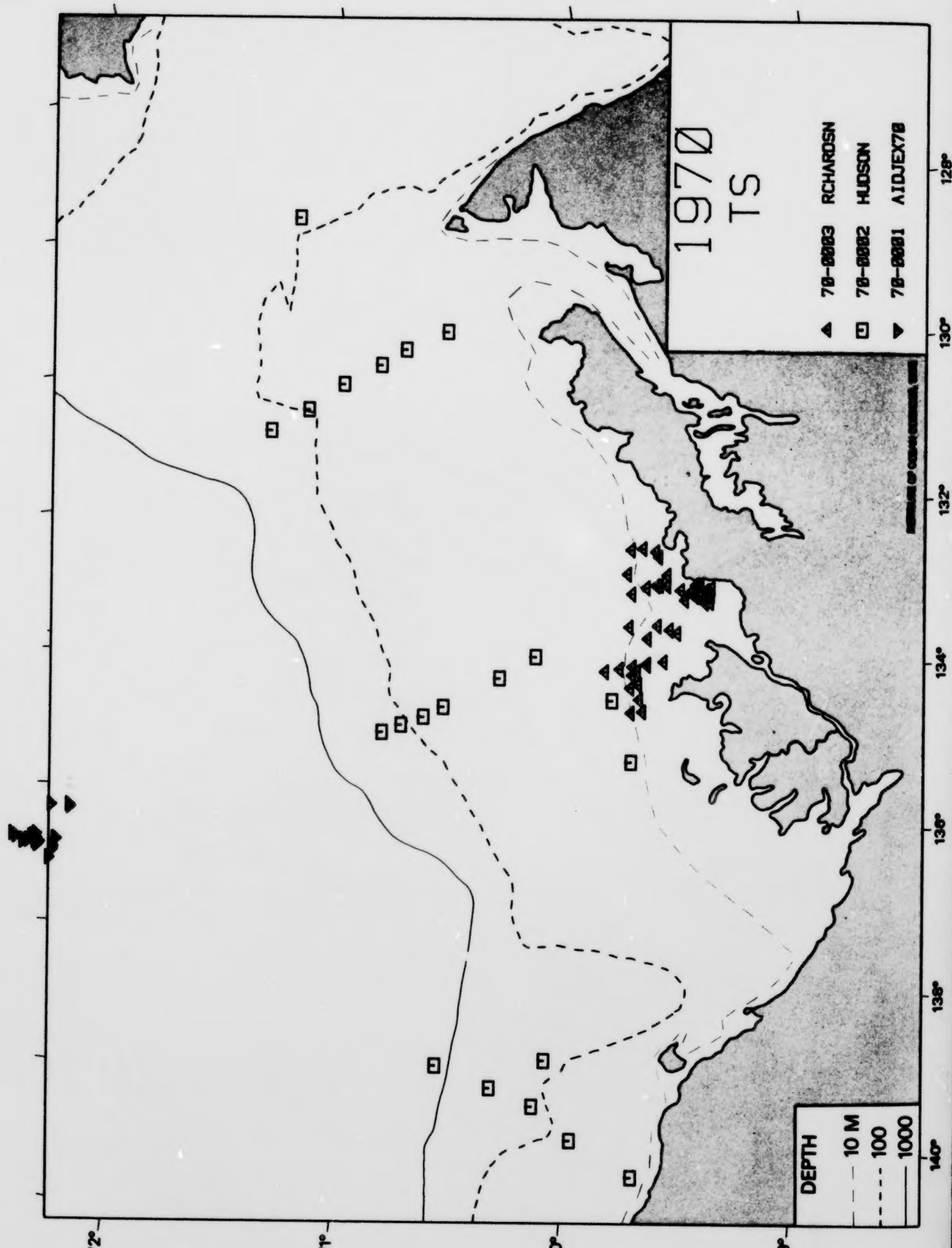
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69°
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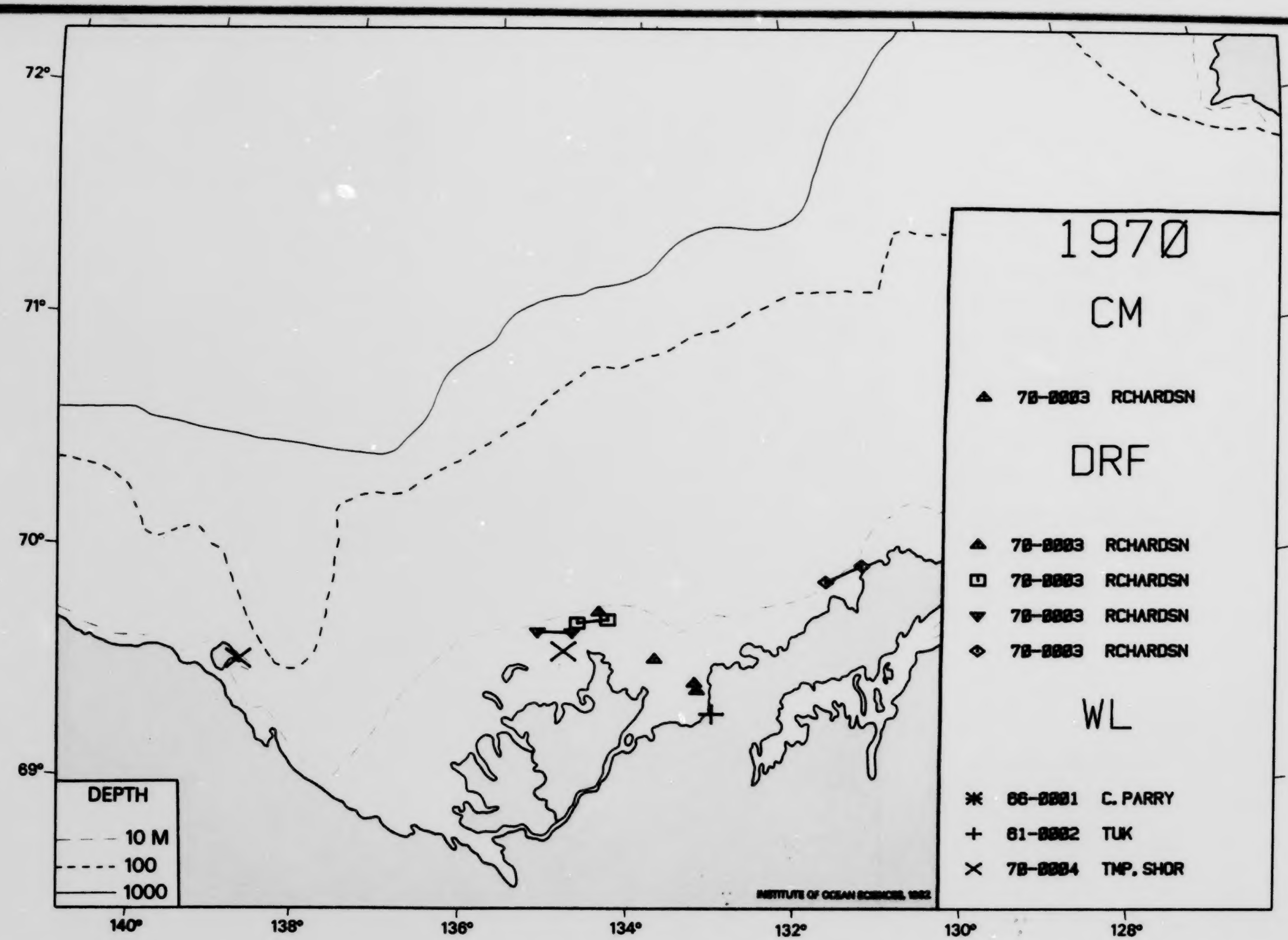
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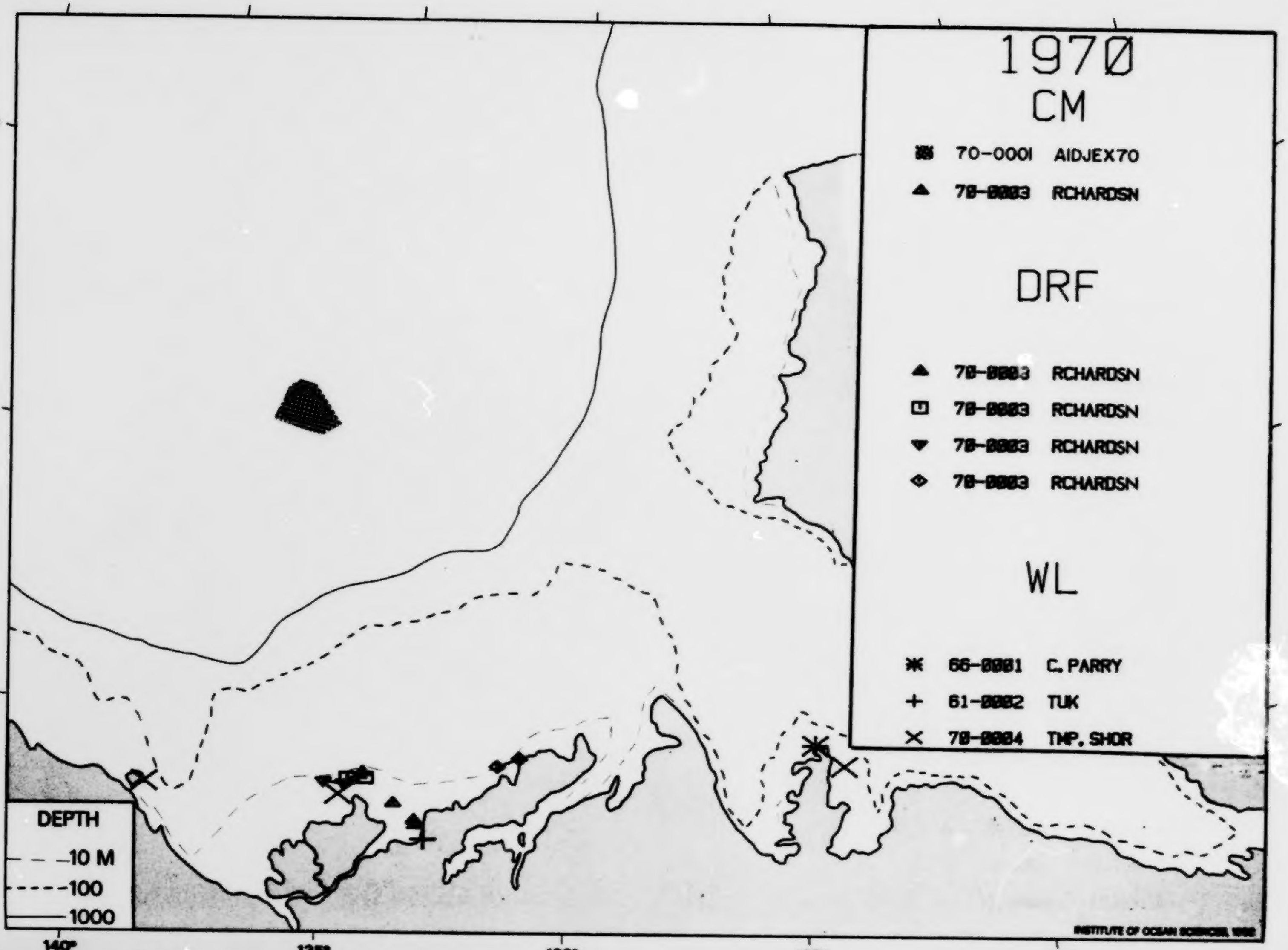
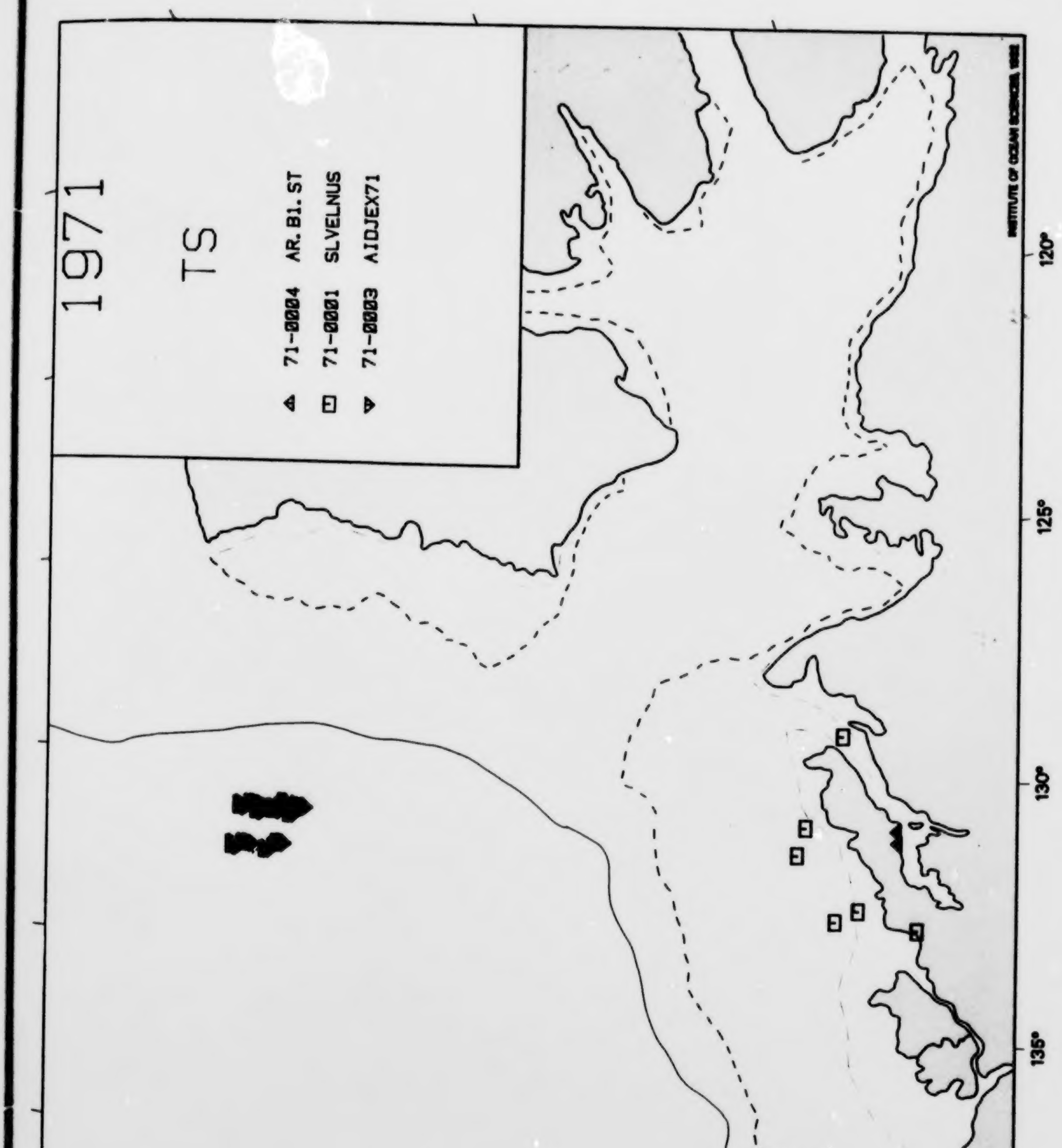
DRF
▲ 70-0003 RCHARDSN
□ 70-0003 RCHARDSN
▼ 70-0003 RCHARDSN
◇ 70-0003 RCHARDSN
WL
✱ 66-0001 C. PARRY
+ 61-0002 TUK
× 70-0004 TMP. SHOR
DEPTH
10 M
100
1000
INSTITUTE OF OCEAN SCIENCES, 1982
72°
71°
70°
69°
140°
138°
136°
134°
132°
130°
128°


1970
CM
▩ 70-0001 AIDJEX70
▲ 70-0003 RCHARDSN
DRF
▲ 70-0003 RCHARDSN
⊡ 70-0003 RCHARDSN
▼ 70-0003 RCHARDSN
◈ 70-0003 RCHARDSN
WL
✳ 66-0001 C. PARRY
+ 61-0002 TUK
× 70-0004 TMP. SHOR
DEPTH
10 M
100
1000
74°
72°
70°
140°
135°
130°
125°
120°
INSTITUTE OF OCEAN SCIENCES


1971
TS
△ 71-0004 AR.B1.ST
□ 71-0001 SLVELNUS
▽ 71-0003 AIDJEX71
DEPTH
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74°
72°
70°
140°
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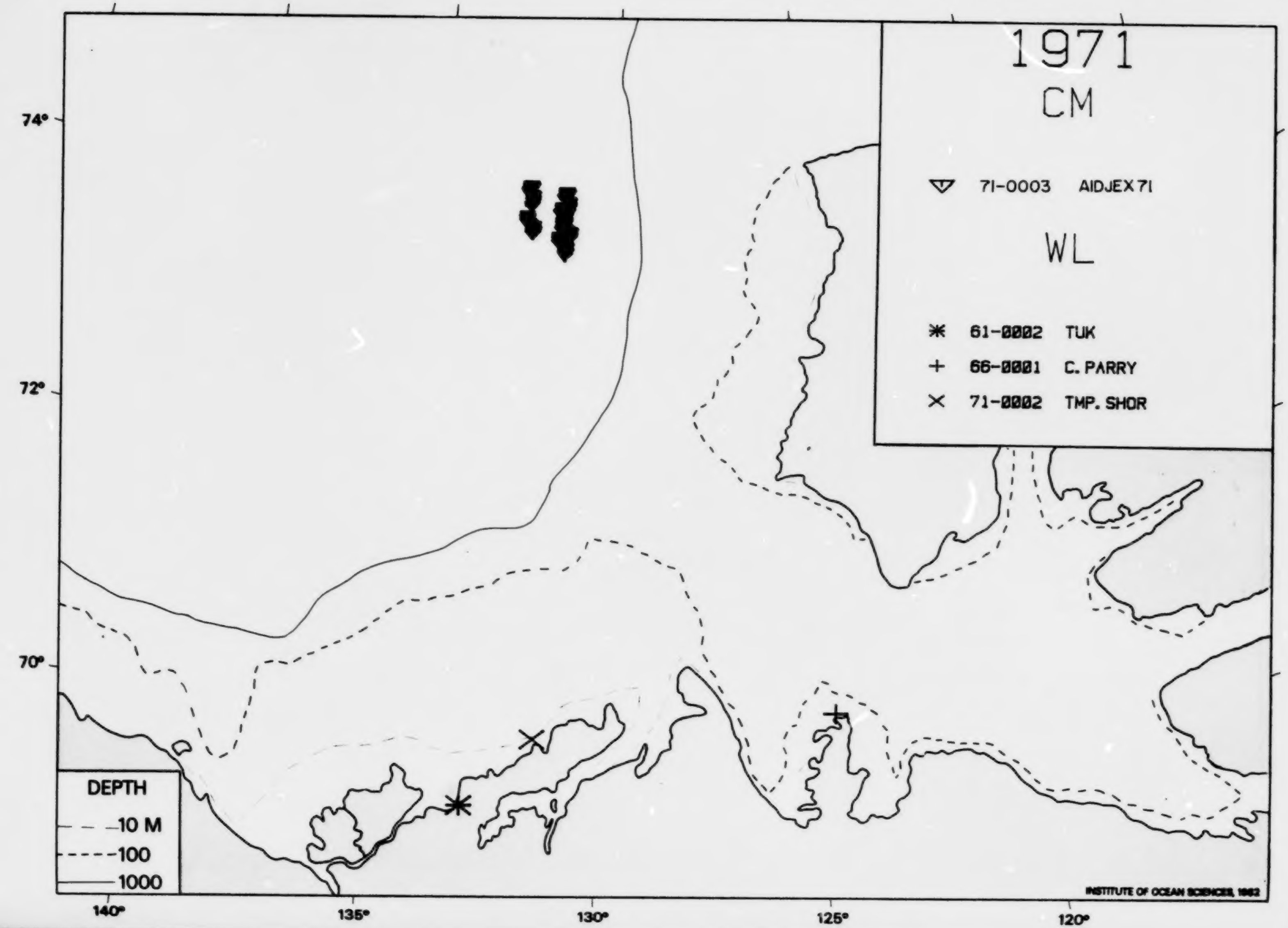
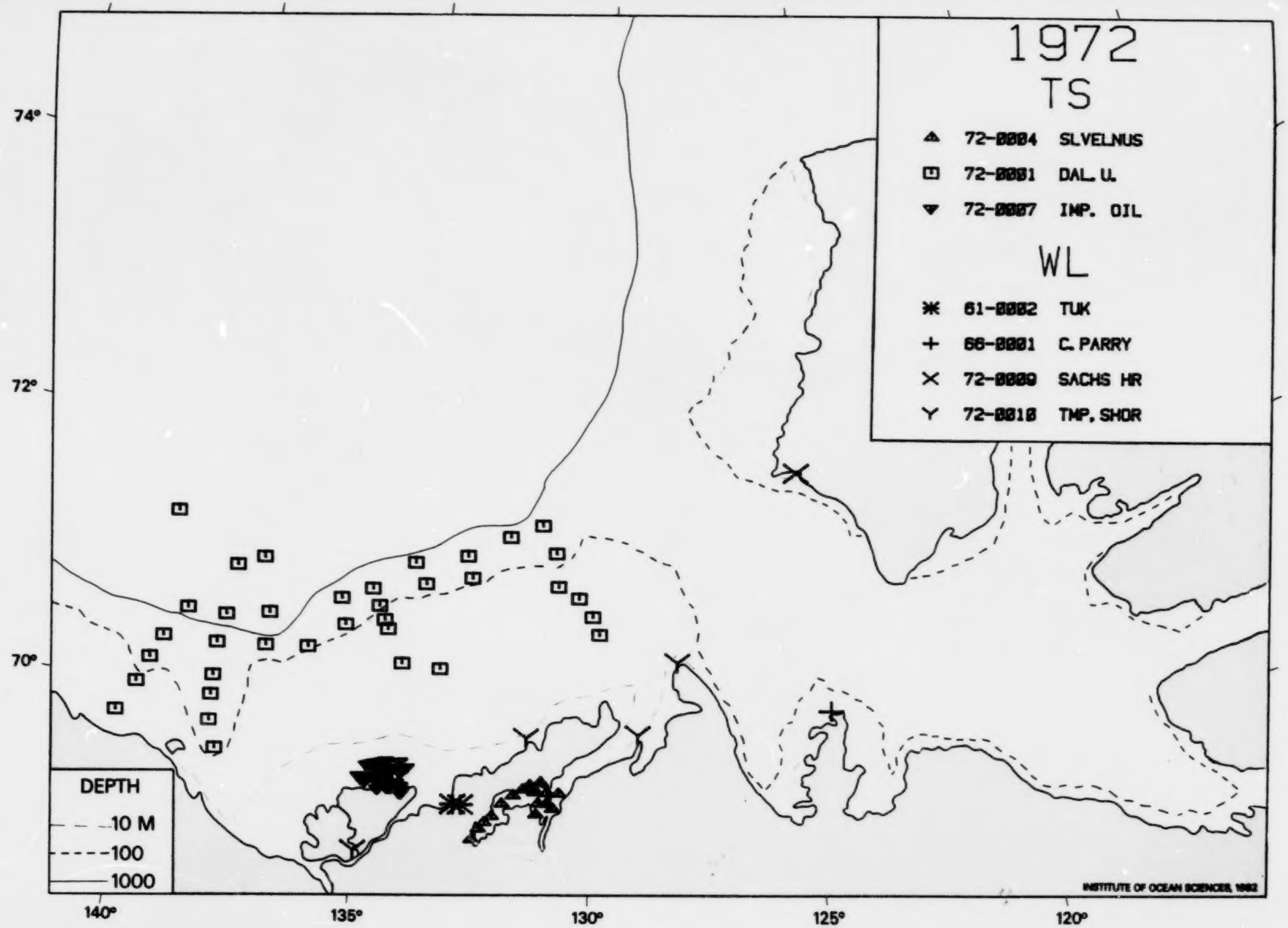
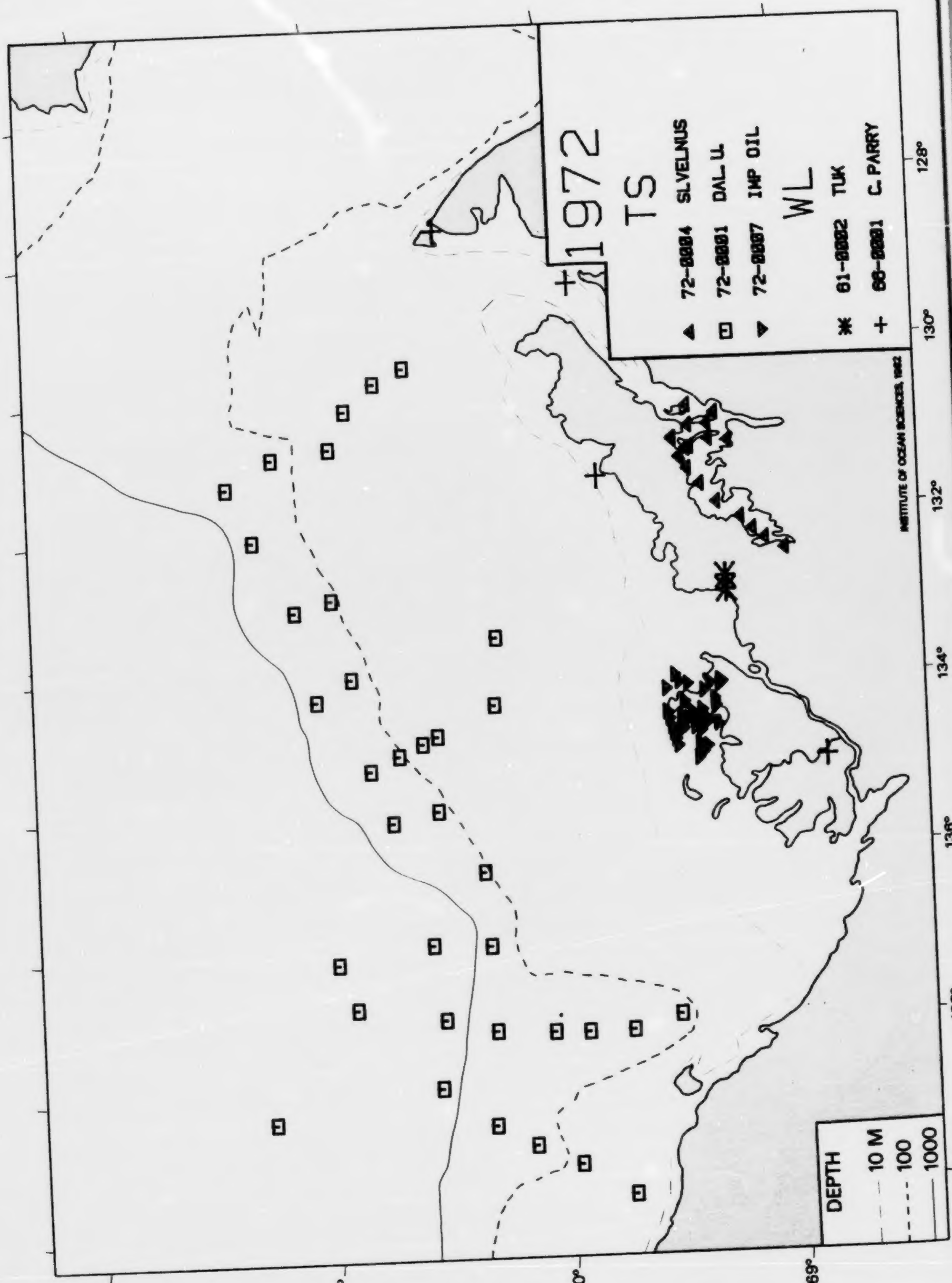
125°
120°
INSTITUTE OF OCEAN SCIENCES, 1982


1971
CM
▽ 71-0003 AIDJEX71
WL
✱ 61-0002 TUK
+ 66-0001 C. PARRY
× 71-0002 TMP. SHOR
DEPTH
10 M
100
1000
74°
72°
70°
140°
135°
130°
125°
120°
INSTITUTE OF OCEAN SCIENCES, 1982


1972
TS
72-0004 SLVELNUS
72-0001 DAL. U.
72-0007 IMP. OIL
WL
61-0002 TUK
66-0001 C. PARRY
72-0009 SACHS HR
72-0010 TMP. SHOR
74°
72°
70°
140°
135°
130°
125°
120°
DEPTH
10 M
100
1000
INSTITUTE OF OCEAN SCIENCES, 1982


1972
TS
▲ 72-0004 SLVELNUS
⊡ 72-0001 DAL U
▼ 72-0007 IMP OIL
WL
✱ 61-0002 TUK
+ 68-0001 C. PARRY
DEPTH
10 M
100
1000
INSTITUTE OF OCEAN SCIENCES, 1982
72°
71°
70°
69°
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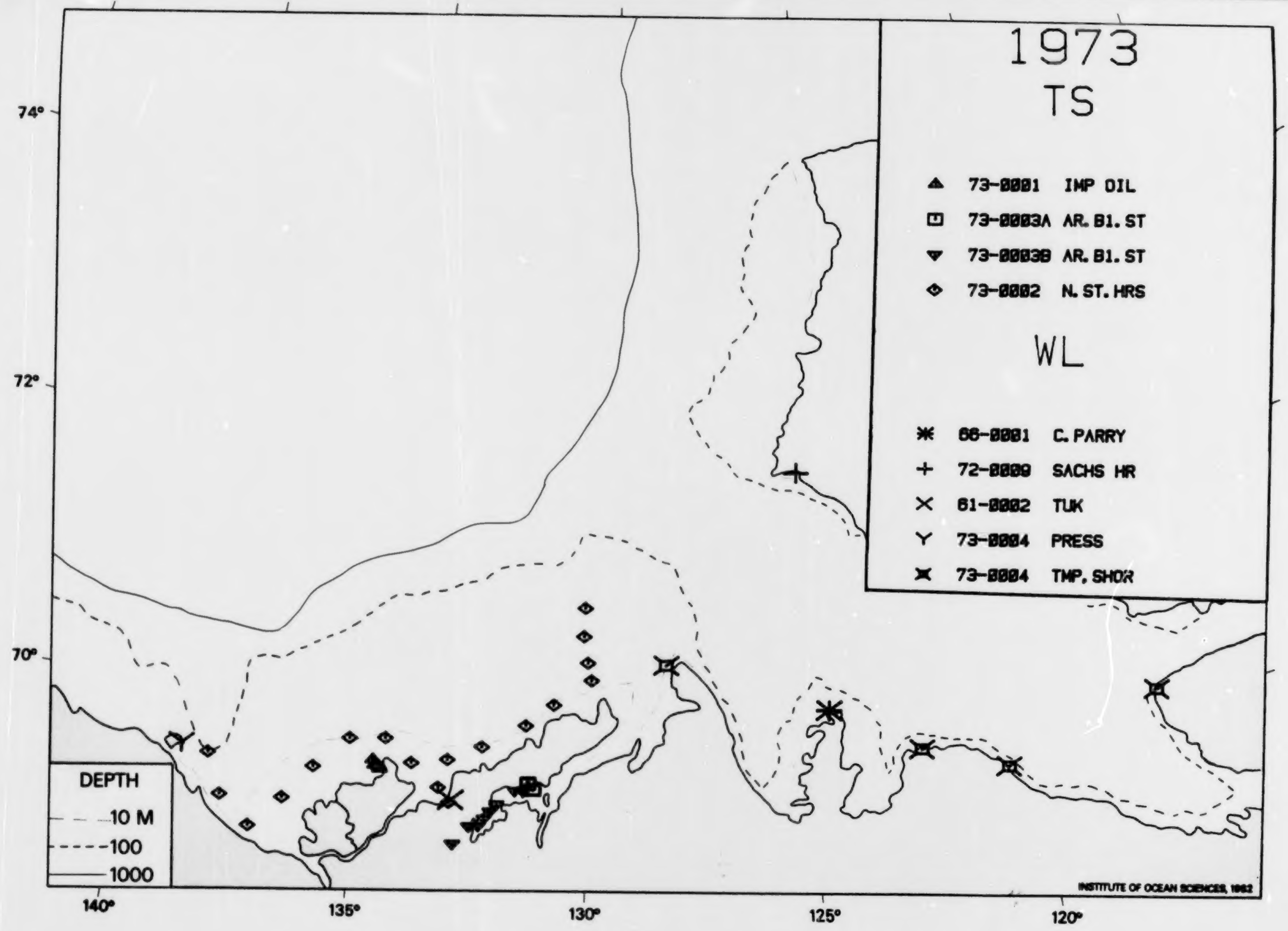
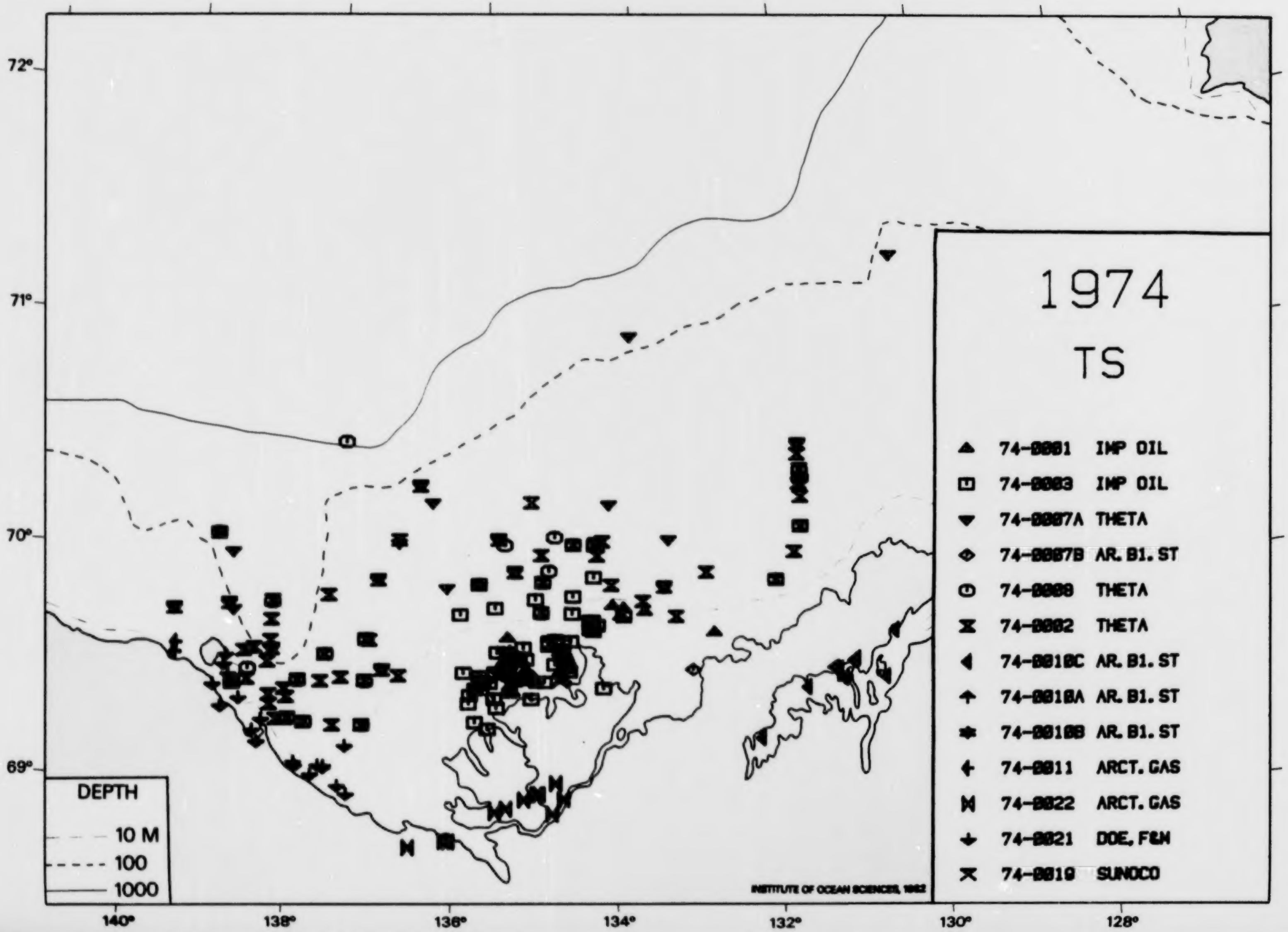
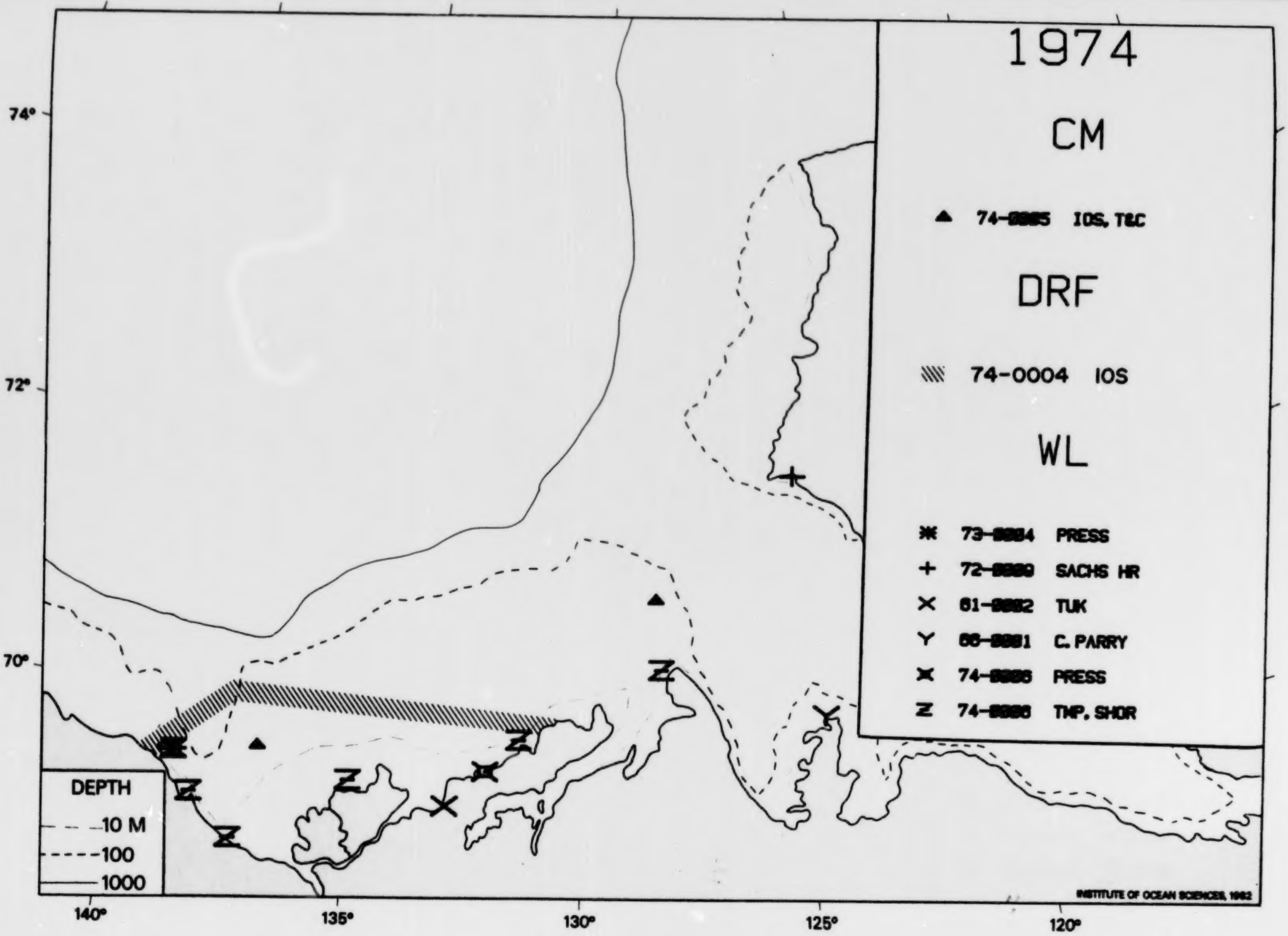
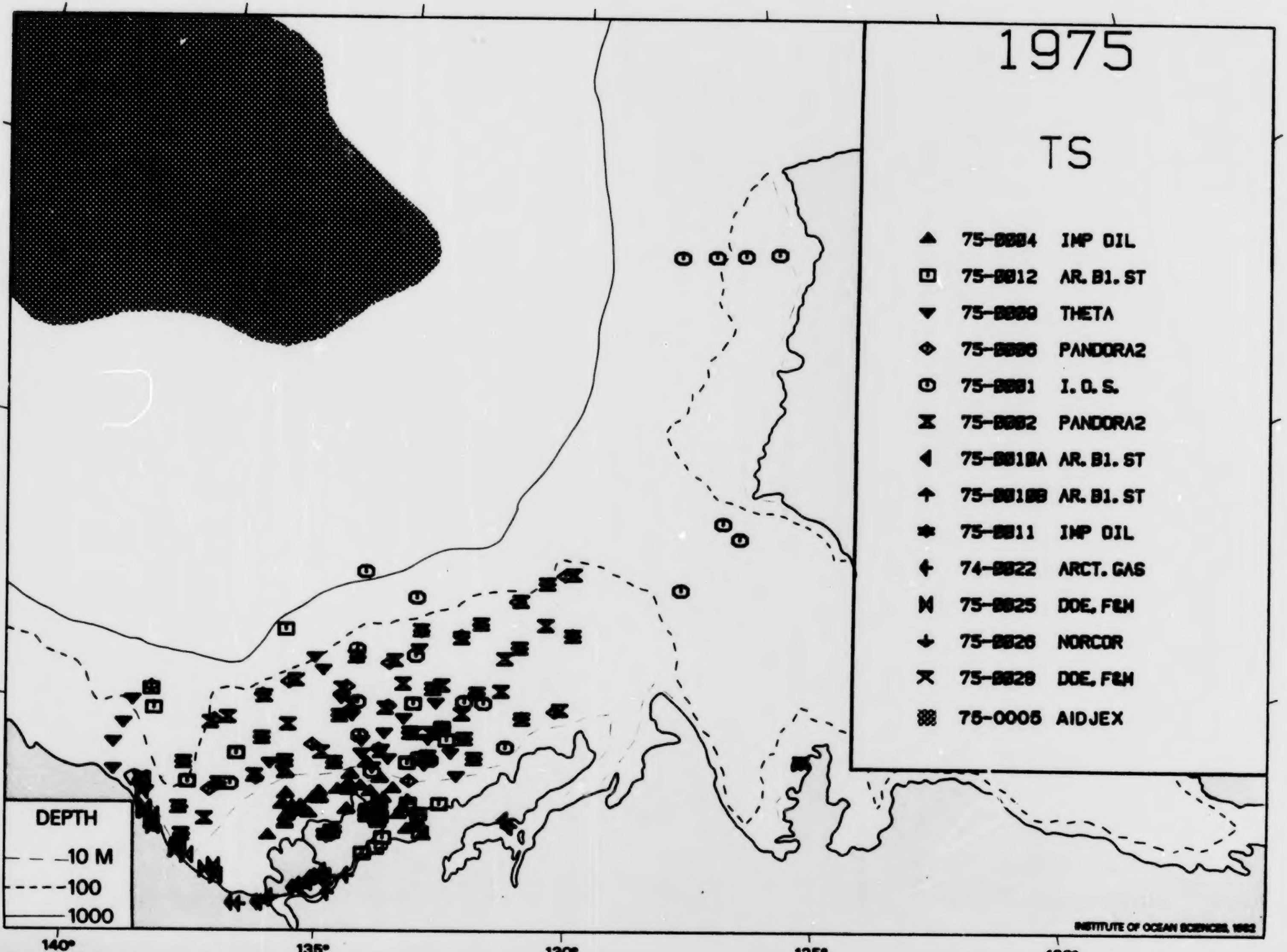
138°
136°
134°
132°
130°
128°


1973
TS
▲ 73-0001 IMP OIL
⊡ 73-0003A AR. B1. ST
▼ 73-0003B AR. B1. ST
◇ 73-0002 N. ST. HRS
WL
✳ 66-0001 C. PARRY
+ 72-0009 SACHS HR
× 61-0002 TUK
Y 73-0004 PRESS
⌘ 73-0004 TMP. SHOR
DEPTH
10 M
100
1000
74°
72°
70°
140°
135°
130°
125°
120°
INSTITUTE OF OCEAN SCIENCES, 1982


1974
TS
74-0001 IMP OIL
74-0003 IMP OIL
74-0007A THETA
74-0007B AR. B1. ST
74-0008 THETA
74-0002 THETA
74-0010C AR. B1. ST
74-0010A AR. B1. ST
74-0010B AR. B1. ST
74-0011 ARCT. GAS
74-0022 ARCT. GAS
74-0021 DOE, F&W
74-0019 SUNOCO
DEPTH
10 M
100
1000
72°
71°
70°
69°
140°
138°
136°
134°
132°
130°
128°
INSTITUTE OF OCEAN SCIENCES, 1982


1974
CM
▲ 74-0005 IOS, T&C
DRF
▨ 74-0004 IOS
WL
✱ 73-0004 PRESS
+ 72-0009 SACHS HR
X 61-0002 TUK
Y 66-0001 C. PARRY
✱ 74-0006 PRESS
Z 74-0008 TMP. SHOR
DEPTH
10 M
100
1000
74°
72°
70°
140°
135°
130°
125°
120°
INSTITUTE OF OCEAN SCIENCES, 1982


1975
TS
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▼ 75-0009 THETA
◈ 75-0006 PANDORA2
ʘ 75-0001 I. O. S.
⧗ 75-0002 PANDORA2
◀ 75-0010A AR. B1. ST
↑ 75-0010B AR. B1. ST
✱ 75-0011 IMP OIL
← 74-0022 ARCT. GAS
⋈ 75-0025 DOE, F&M
↓ 75-0026 NORCOR
ⴳ 75-0028 DOE, F&M
▩ 75-0005 AIDJEX
DEPTH
10 M
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1000
74°
72°
70°
140°
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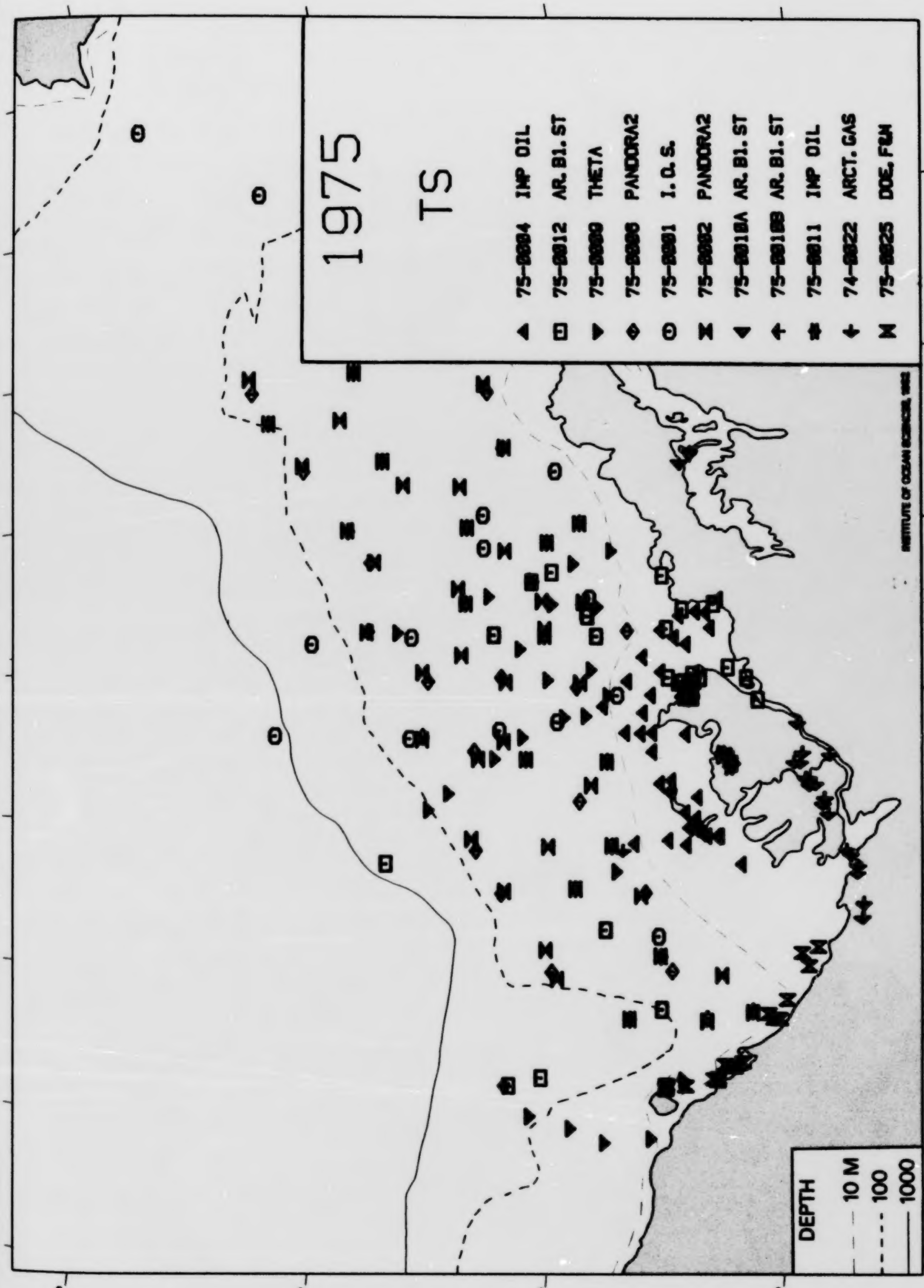
130°
125°
120°
INSTITUTE OF OCEAN SCIENCES, 1982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TS
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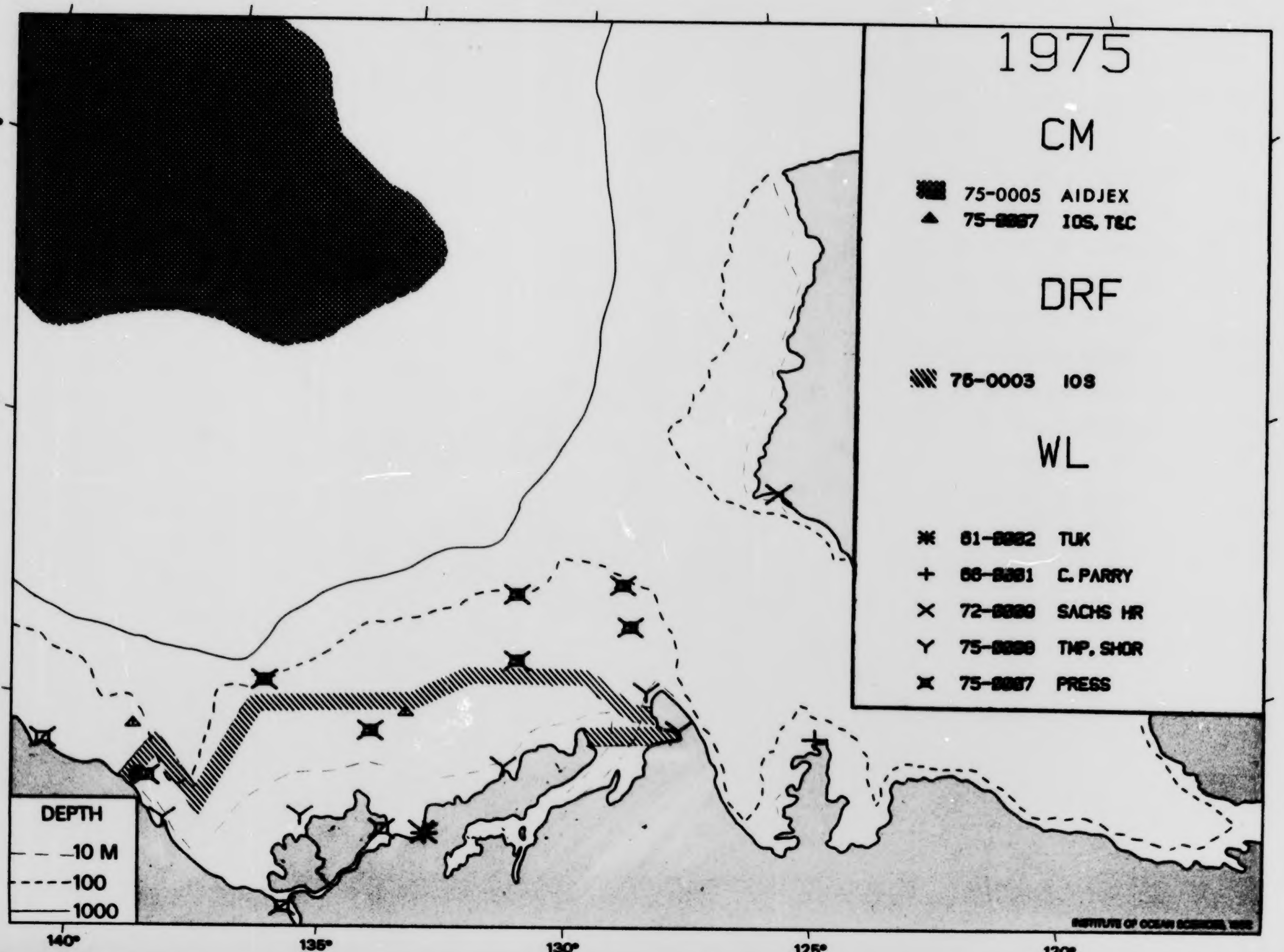
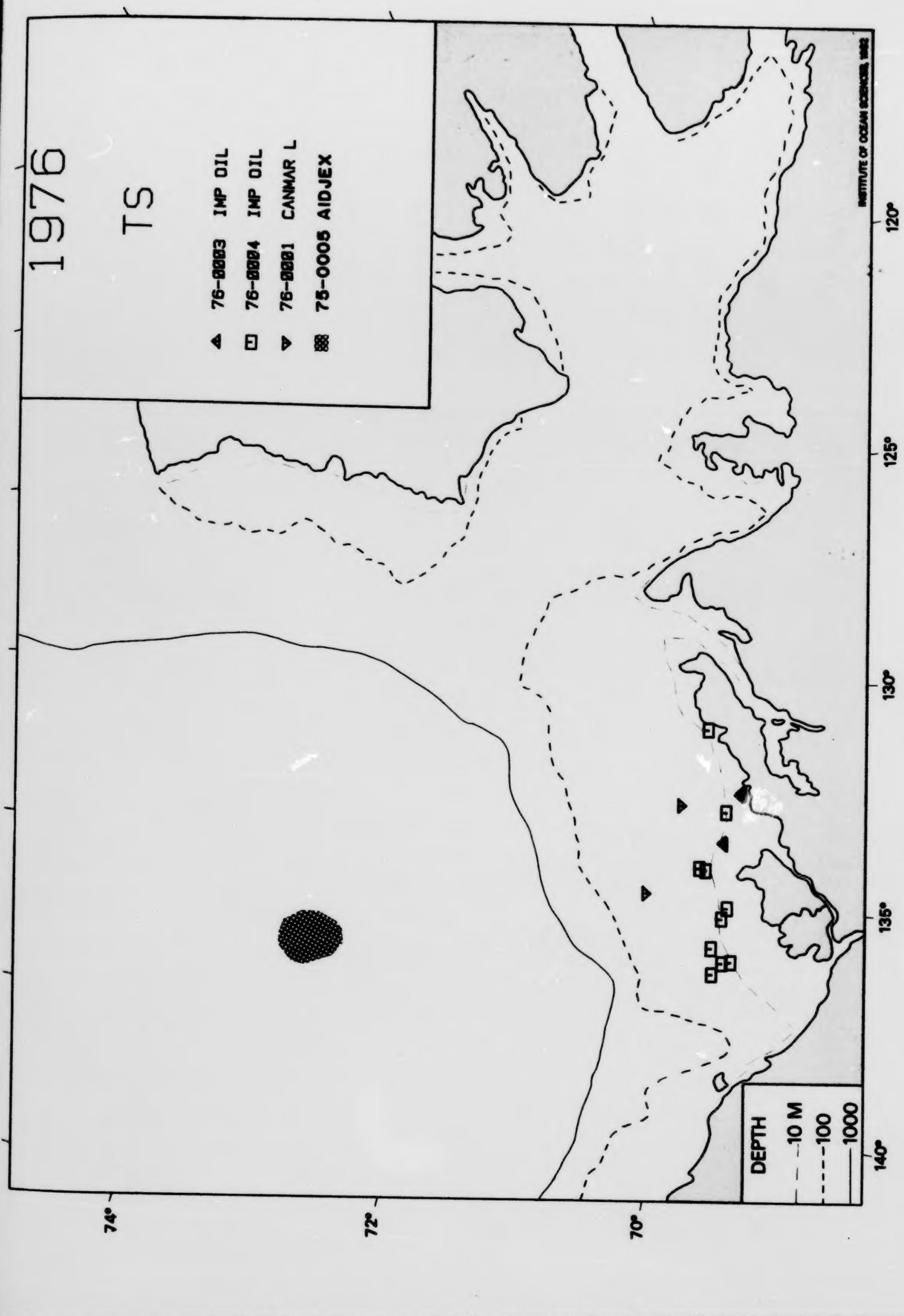
75-0012 AR. B1. ST
75-0009 THETA
75-0006 PANDORA2
75-0001 I.O.S.
75-0002 PANDORA2
75-0018A AR. B1. ST
75-0018B AR. B1. ST
75-0011 IMP OIL
74-0022 ARCT. GAS
75-0025 DOE, FWM
DEPTH
10 M
100
1000
72°
71°
70°
69°
128°
130°
132°
134°
136°
138°
140°
INSTITUTE OF OCEAN SCIENCES, 1982


1975
CM
75-0005 AIDJEX
75-0007 IOS, T&C
DRF
76-0003 IOS
WL
61-0002 TUK
68-0001 C. PARRY
72-0000 SACHS HR
75-0000 TMP. SHOR
75-0007 PRESS
DEPTH
10 M
100
1000
74°
72°
70°
140°
135°
130°
125°
120°
INSTITUTE OF OCEAN SCIENCES,


1976
TS
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⊡ 76-0004 IMP OIL
▼ 76-0001 CANMAR L
▦ 75-0005 AIDJEX
DEPTH
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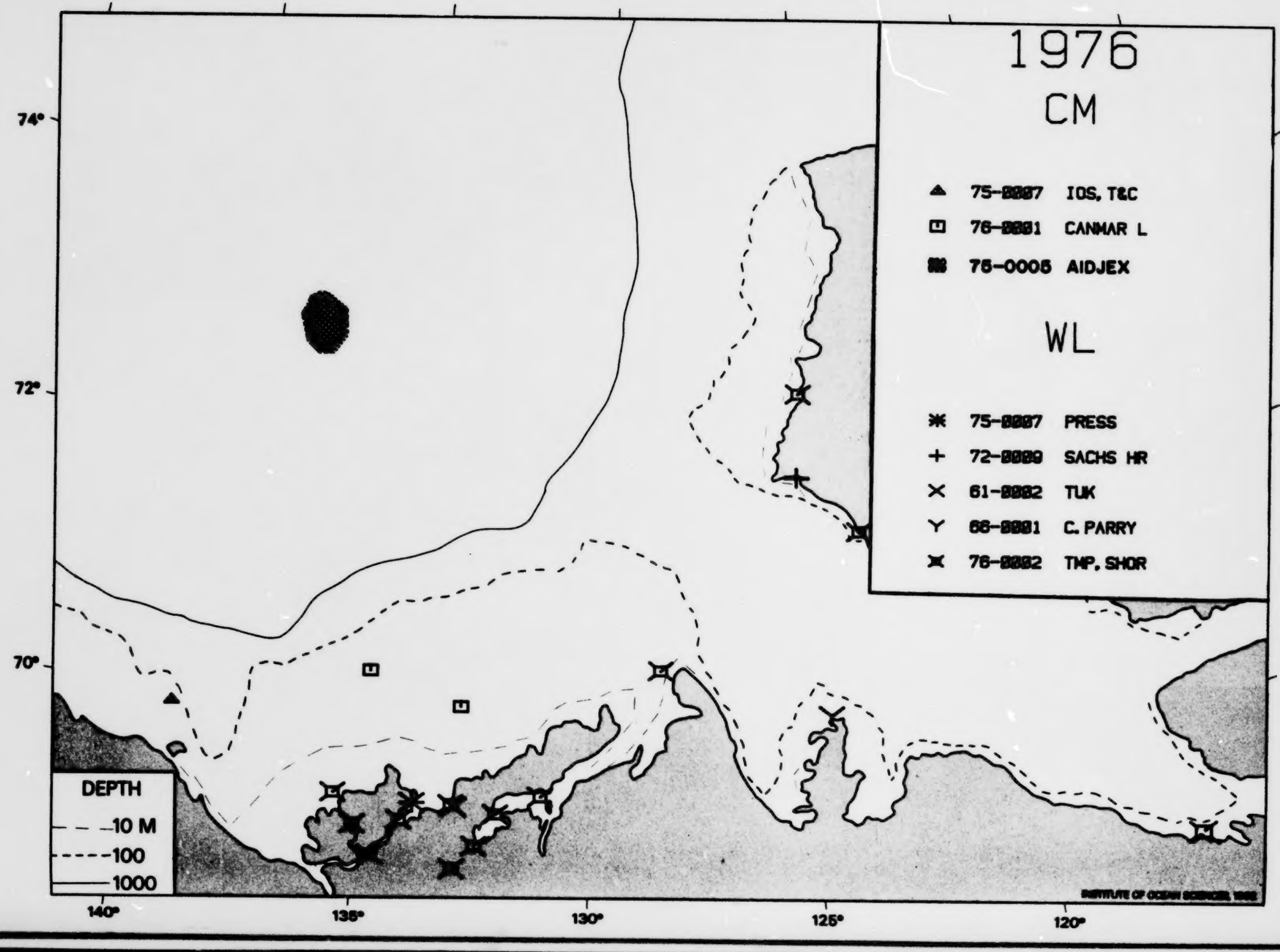
1000
INSTITUTE OF OCEAN SCIENCES, 1982
120°
125°
130°
135°
140°
74°
72°
70°


1976
CM
▲ 75-0007 IOS, T&C
⊡ 76-0001 CANMAR L
▨ 76-0005 AIDJEX
WL
✳ 75-0007 PRESS
+ 72-0009 SACHS HR
× 61-0002 TUK
Y 66-0001 C. PARRY
⌘ 76-0002 TMP. SHOR
DEPTH
10 M
100
1000
74°
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70°
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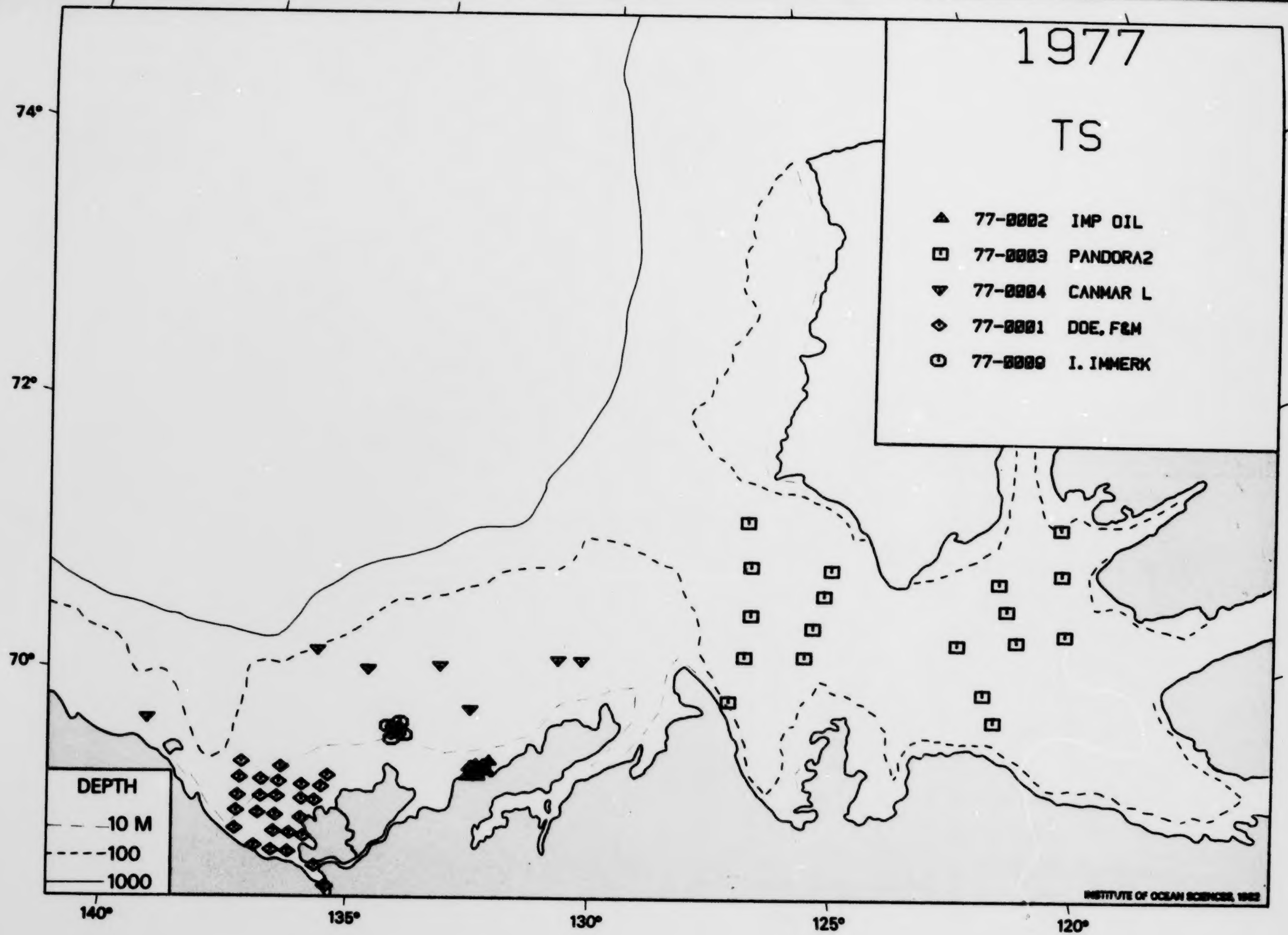
130°
125°
120°
INSTITUTE OF OCEAN SCIENCES


1977
TS
77-0002 IMP OIL
77-0003 PANDORA2
77-0004 CANMAR L
77-0001 DOE, F&M
77-0009 I. IMMERK
DEPTH
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100
1000
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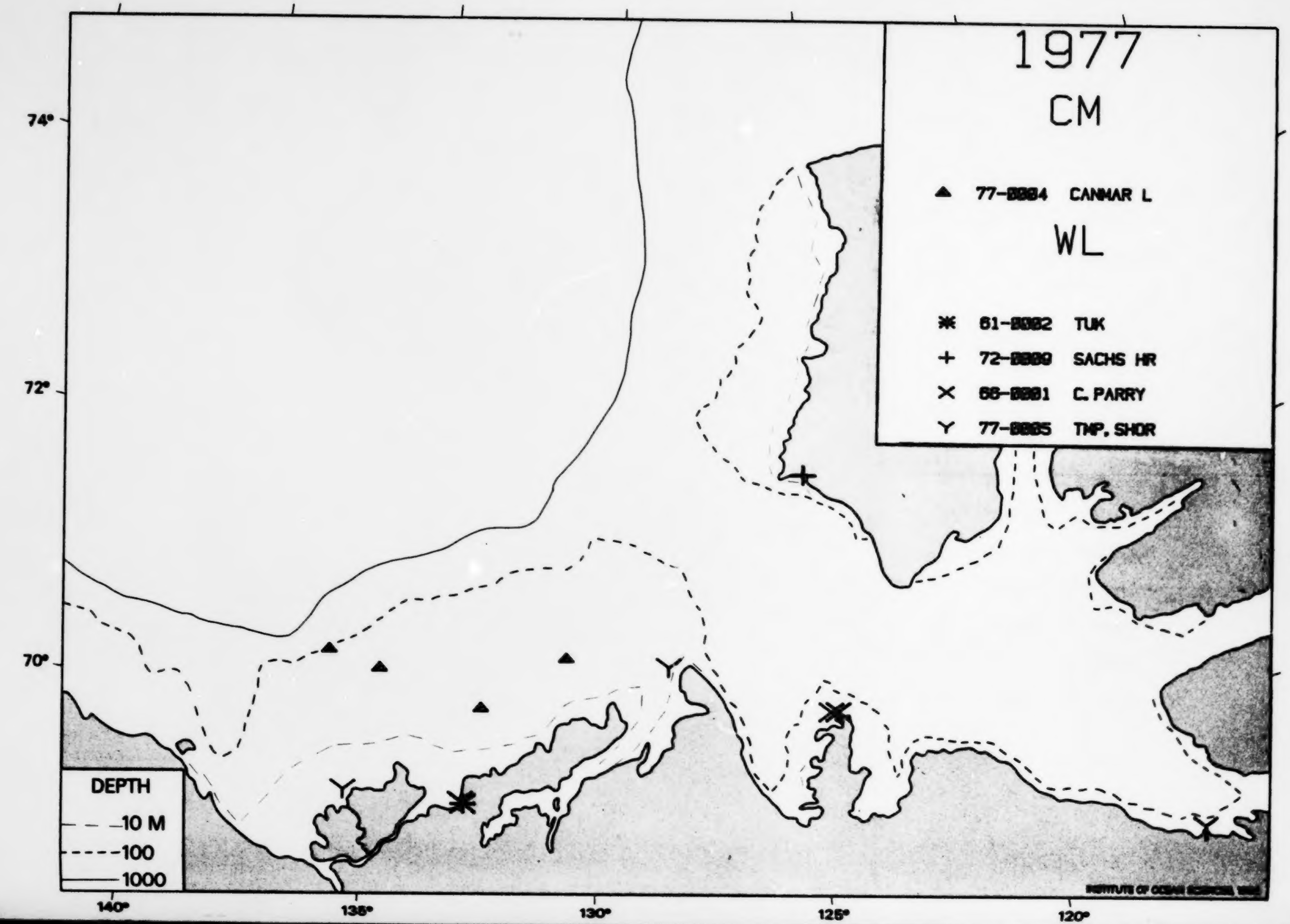
72°
70°
140°
135°
130°
125°
120°
INSTITUTE OF OCEAN SCIENCES, 1982


1977
CM
▲ 77-0004 CANMAR L
WL
✳ 61-0002 TUK
+ 72-0009 SACHS HR
× 66-0001 C. PARRY
Y 77-0005 TMP, SHOR
DEPTH
10 M
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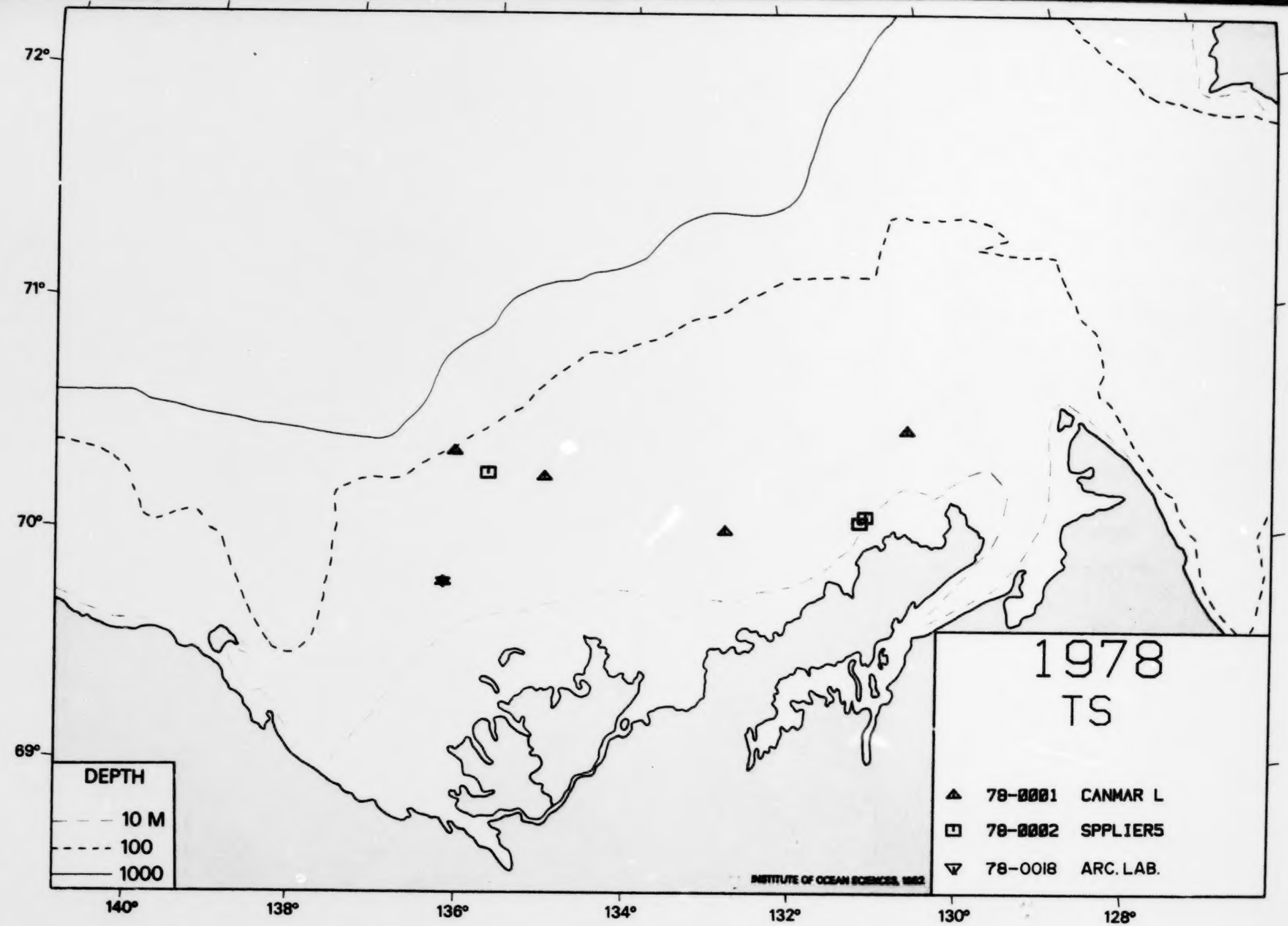
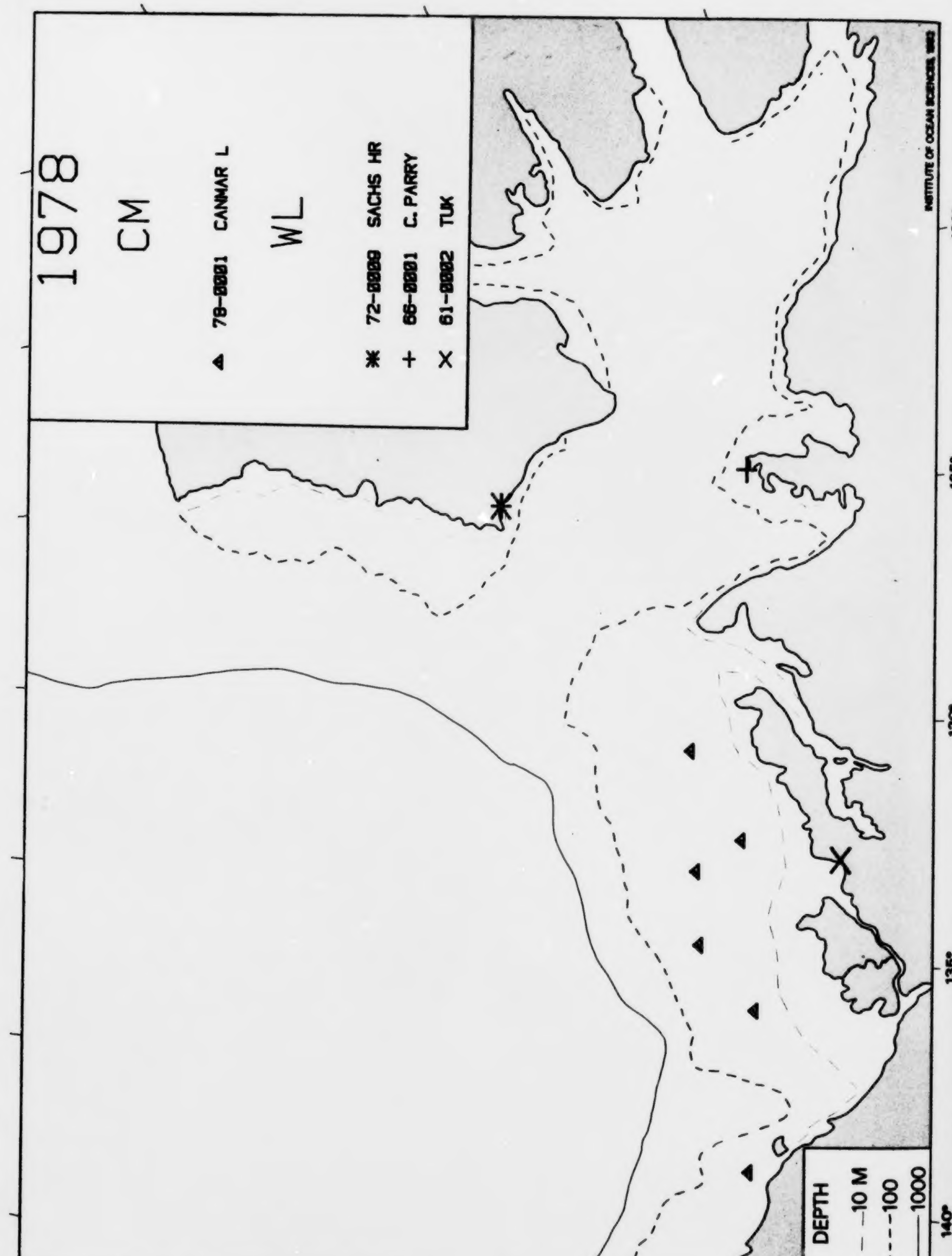
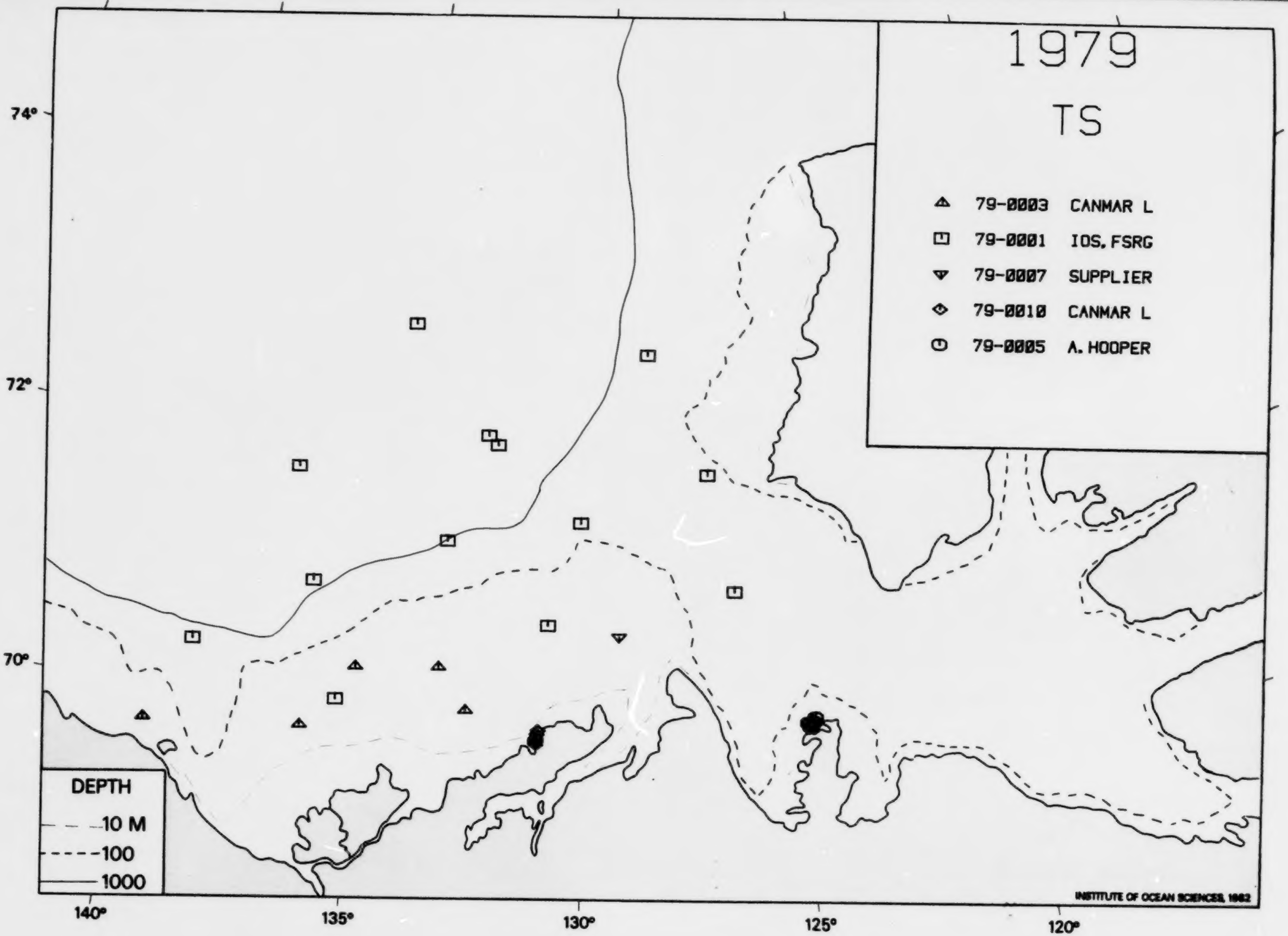
1000
74°
72°
70°
140°
135°
130°
125°
120°
INSTITUTE OF OCEAN SCIENCES


72°
71°
70°
69°
140°
138°
136°
134°
132°
130°
128°
DEPTH
10 M
100
1000
1978
TS
78-0001 CANMAR L
78-0002 SPPLIER5
78-0018 ARC. LAB.
INSTITUTE OF OCEAN SCIENCES, 1982


1978
CM
▲ 78-0001 CANMAR L
WL
✱ 72-0000 SACHS HR
+ 66-0001 C. PARRY
× 61-0002 TUK
DEPTH
10 M
100
1000
74°
72°
70°
140°
135°
130°
125°
120°
INSTITUTE OF OCEAN SCIENCES, 1982


1979
TS
79-0003 CANMAR L
79-0001 IOS. FSRG
79-0007 SUPPLIER
79-0010 CANMAR L
79-0005 A. HOOPER
DEPTH
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72°
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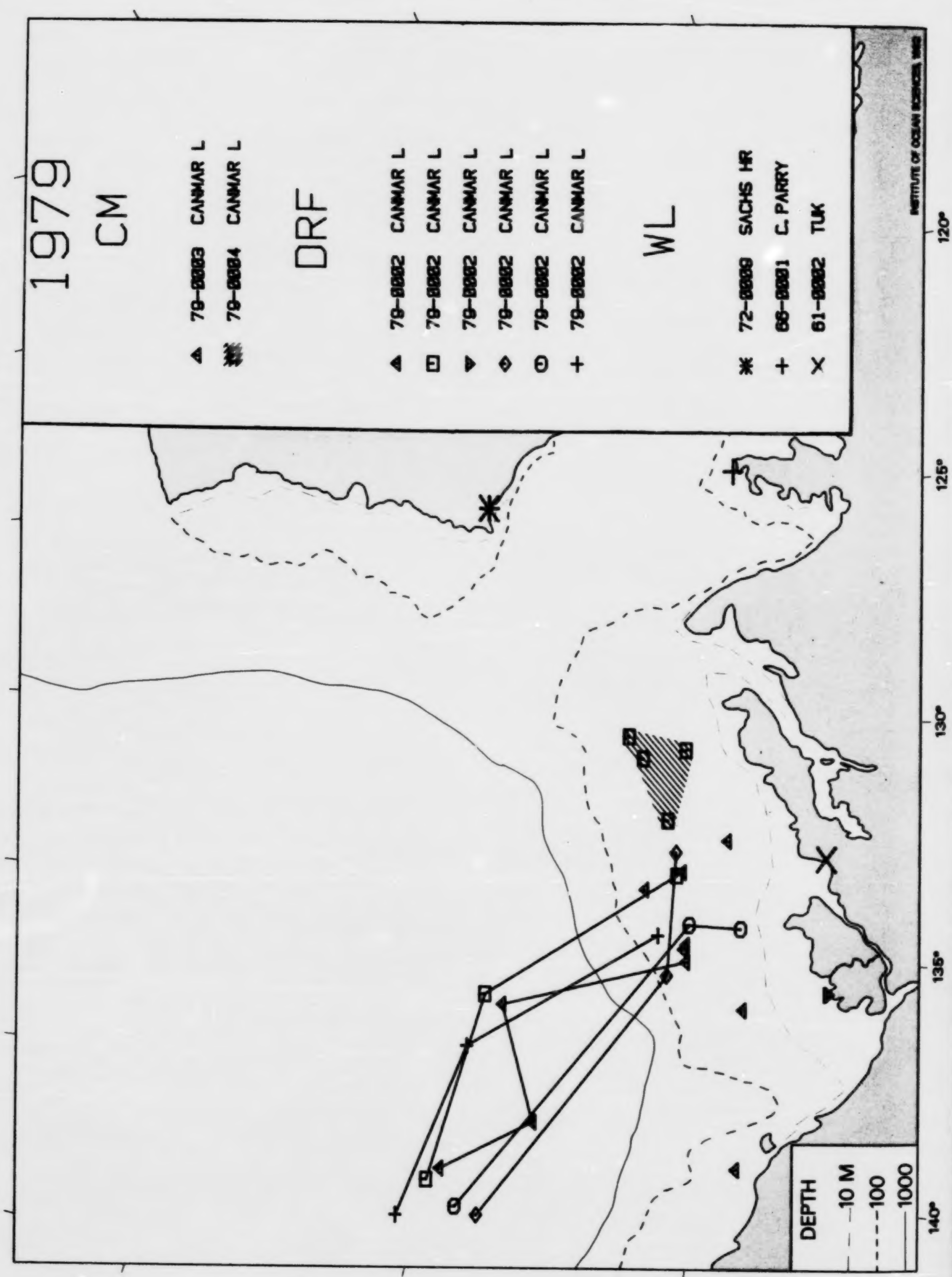
INSTITUTE OF OCEAN SCIENCES, 1982


1979
CM
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79-0004 CANMAR L
DRF
79-0002 CANMAR L
79-0002 CANMAR L
79-0002 CANMAR L
79-0002 CANMAR L
79-0002 CANMAR L
79-0002 CANMAR L
WL
72-0009 SACHS HR
66-0001 C. PARRY
61-0002 TUK
DEPTH
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1000
74°
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135°
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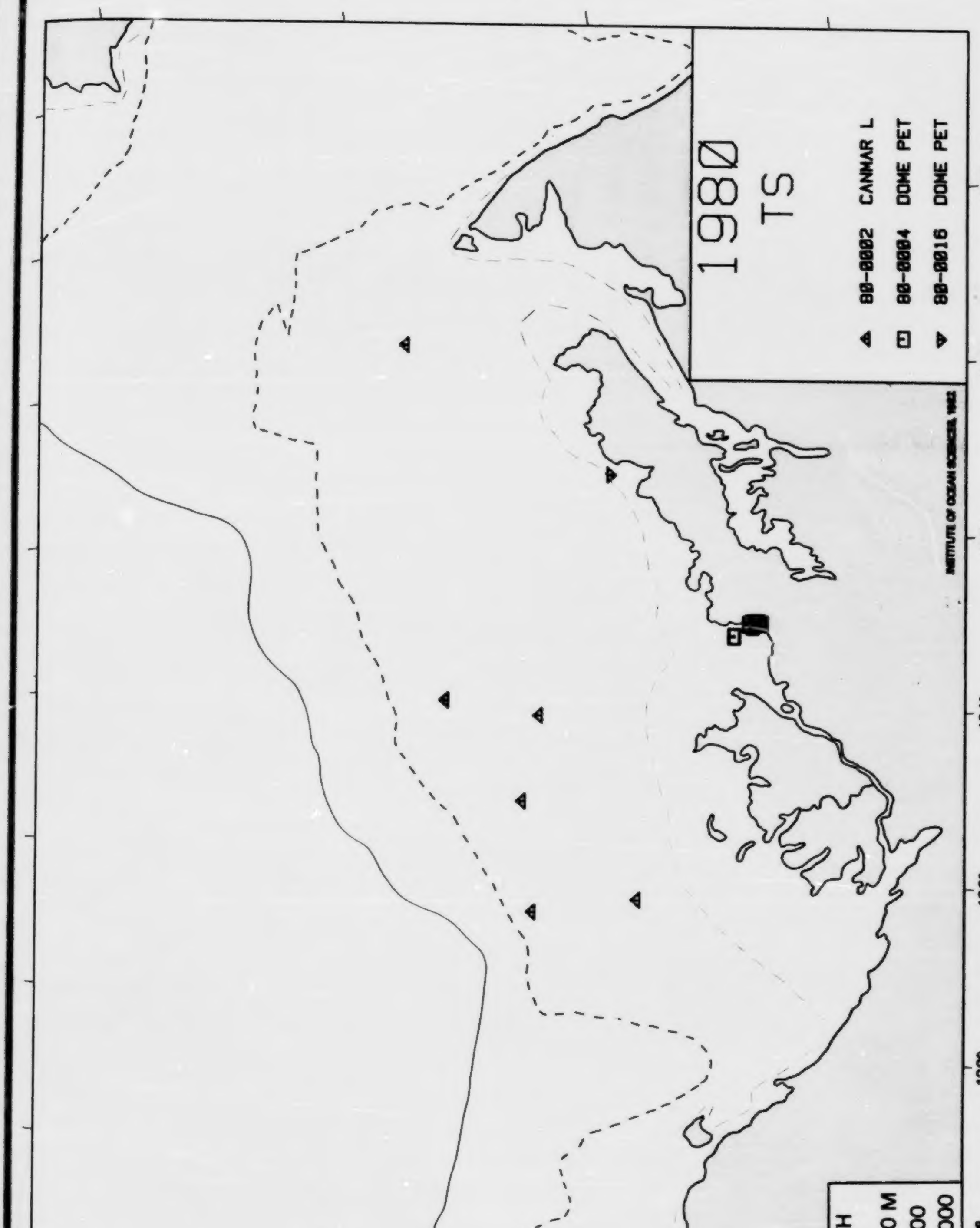
125°
120°
INSTITUTE OF OCEAN SCIENCES 1982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TS
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⊡ 80-0004 DOME PET
▼ 80-0016 DOME PET
DEPTH
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INSTITUTE OF OCEAN SCIENCES, 1982
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69°
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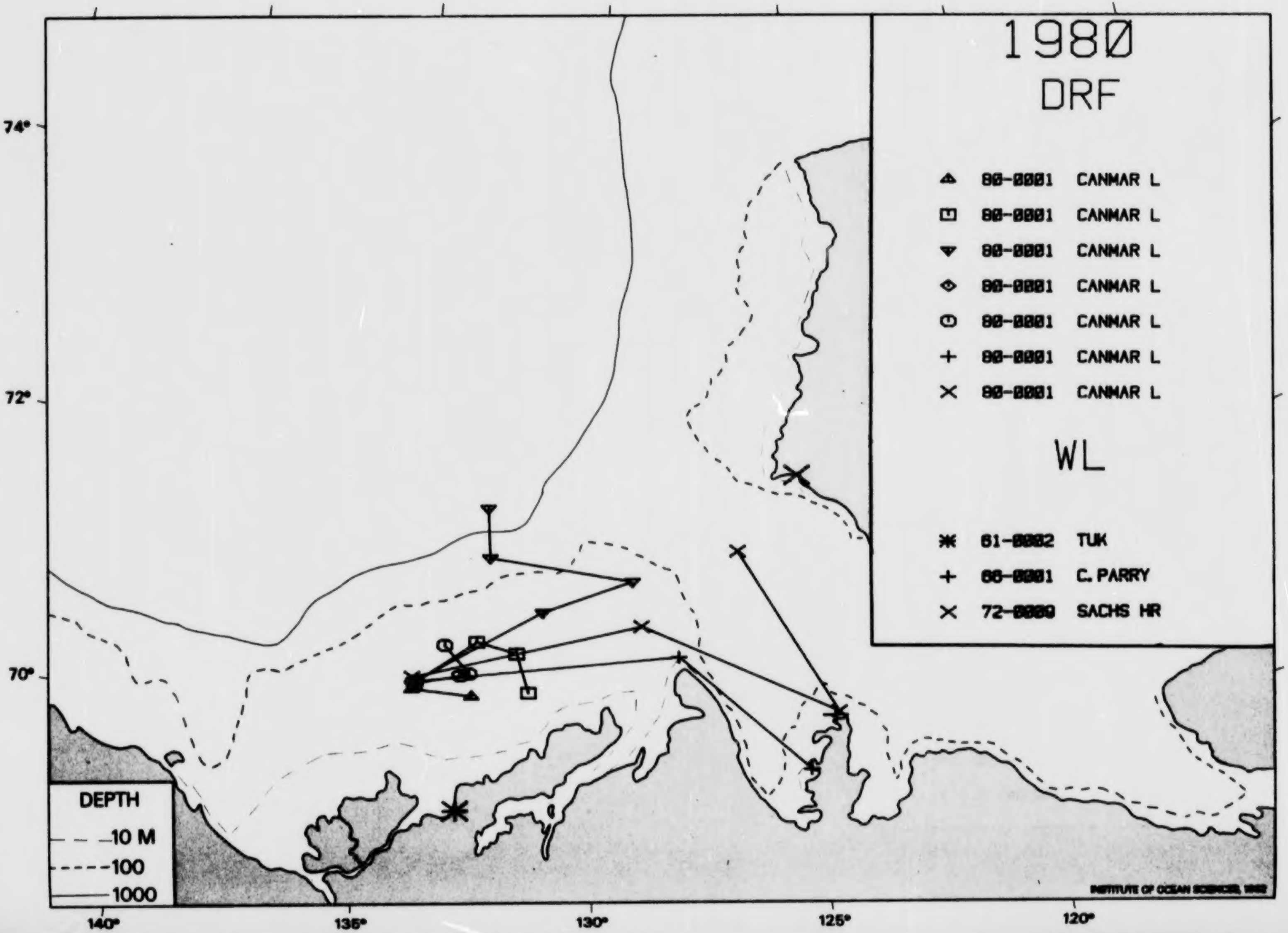
130°
132°
134°
136°
138°
140°


1980
DRF
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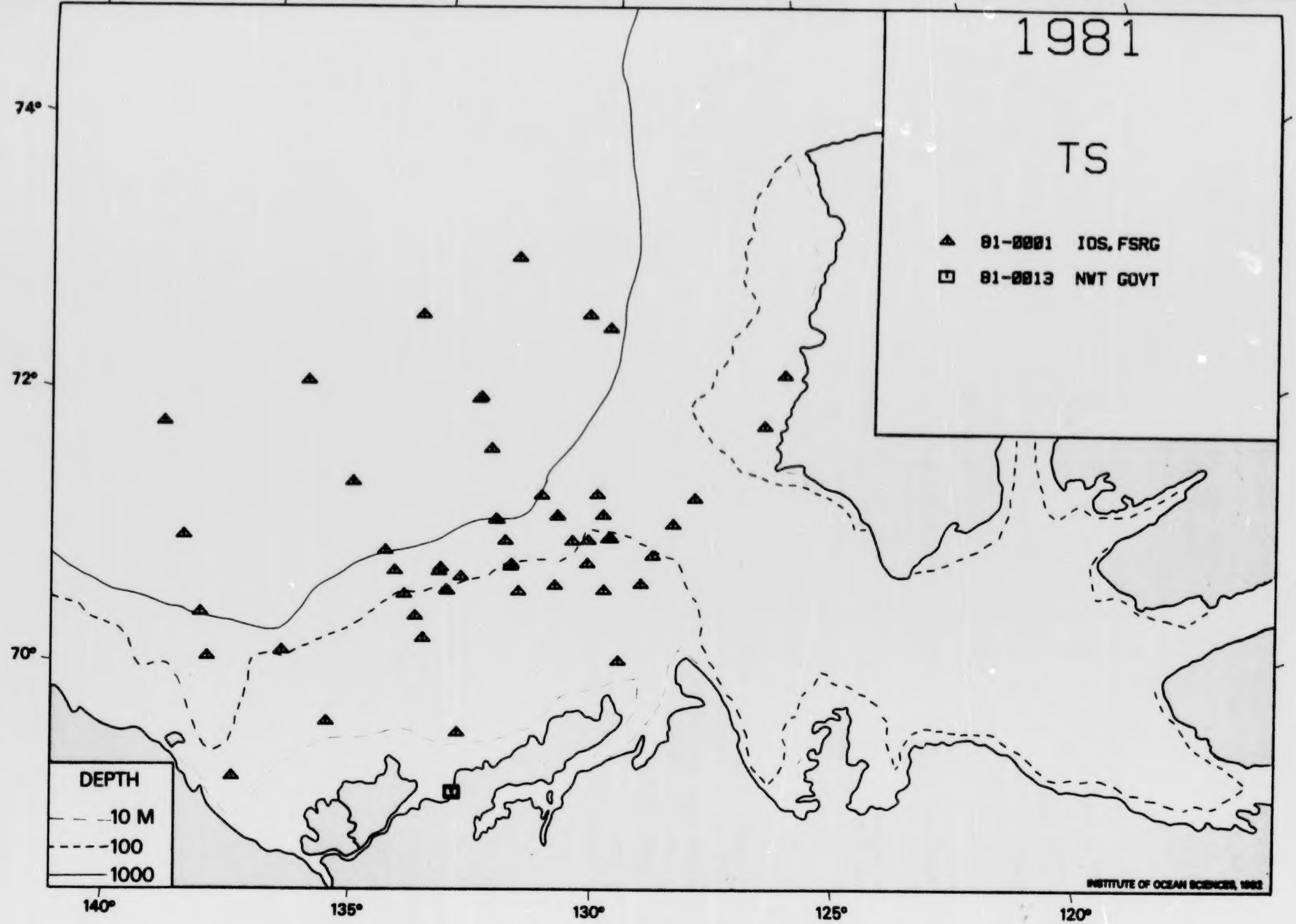
⊡ 80-0001 CANMAR L
▼ 80-0001 CANMAR L
◈ 80-0001 CANMAR L
⊖ 80-0001 CANMAR L
+ 80-0001 CANMAR L
× 80-0001 CANMAR L
WL
✳ 61-0002 TUK
+ 66-0001 C. PARRY
× 72-0000 SACHS HR
DEPTH
10 M
100
1000
74°
72°
70°
140°
135°
130°
125°
120°
INSTITUTE OF OCEAN SCIENCES, 1982


1981
TS
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81-0013 NWT GOVT
DEPTH
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140°
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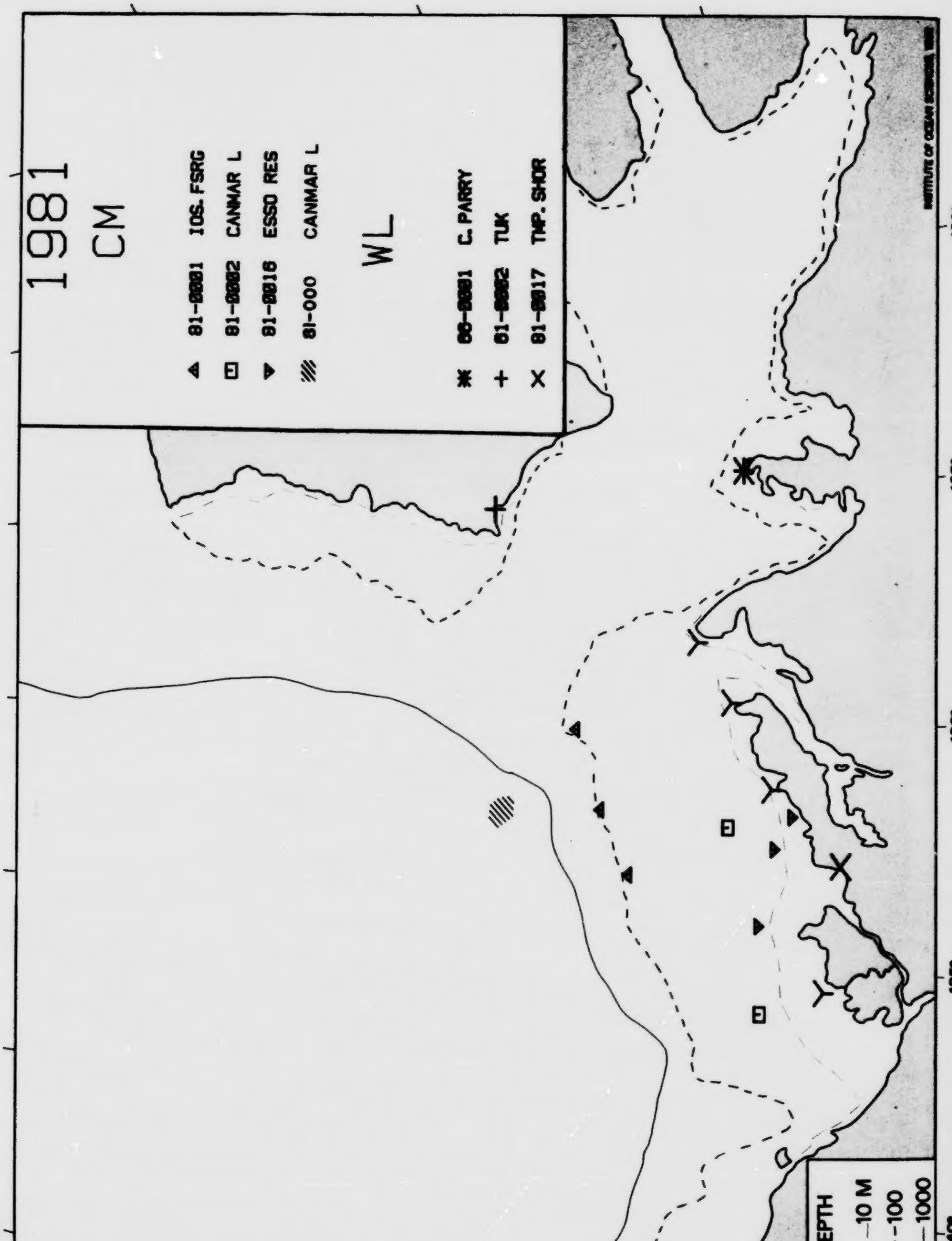
125°
120°
INSTITUTE OF OCEAN SCIENCES, 1982


1981
CM
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▣ 81-0002 CANMAR L
▼ 81-0016 ESSO RES
▨ 81-000 CANMAR L
WL
✳ 80-0001 C. PARRY
+ 81-0002 TUK
× 81-0017 TWP. SHOR
DEPTH
10 M
100
1000
74°
72°
70°
140°
135°
130°
125°
120°
INSTITUTE OF OCEAN SCIENCES

10. INDEXES

This section contains three indexes to the data sets. The first is a geographical index which provides a listing by sub-areas (defined in Figures 1a and 1b). All data sets with any measurements in a particular sub-area are listed by number under that sub-area. The second index classifies the data sets by measurement type, under the following headings:

Temperature & Salinity:	measurements at discrete points in the water column.
Profiles of temperature and salinity:	measurements made with a profiling instrument such as a CTD.
Water levels, bottom pressure:	measurements from shore-based tide stations or bottom pressure gauges.
Eulerian currents:	measurements of current velocity at a fixed point with a current meter.
Lagrangian drift paths:	the tracks of free-floating drifters.

The third index lists references for each data set by number. The data set number appears at the left hand side of the page, with references listed to the right. The first reference listed is a data report (if one exists) followed by other interpretive or analytical references, indented with respect to the first reference. The list of interpretive or analytical references may not be exhaustive.

10.1 GEOGRAPHICAL

THETIS/ PHILLIPS BAYS	MACKENZIE BAY	KUGMALLIT BAY	MCKINLEY BAY	ESKIMO LAKES & LIVERPOOL BAY	AMUNDSEN GULF
35-0001	52-0001	61-0001	71-0002	61-0001	35-0001
51-0002	60-0003	61-0002	75-0008	62-0001	37-0001
52-0001	64-0003	62-0002	79-0010	71-0001	51-0002
60-0003	65-0001	62-0003	80-0016	71-0004	52-0001
73-0004	66-0006	62-0004		72-0004	53-0001
74-0002	72-0004	63-0002		73-0003	54-0001
74-0004	73-0002	63-0003		74-0010	54-0002
74-0005	74-0001	64-0003		75-0003	54-0003
74-0006	74-0002	65-0001		75-0007	55-0002
75-0002	74-0003	66-0002		75-0008	57-0002
75-0003	74-0004	70-0003		75-0010	59-0002
75-0006	74-0005	71-0001		76-0002	62-0001
75-0007	74-0019	72-0010		77-0005	63-0001
75-0008	74-0021	73-0002			66-0001
75-0009	74-0020	74-0001			70-0002
60-0001	74-0022	74-0003			70-0004
	75-0002	74-0004			73-0004
	75-0003	74-0005			75-0001
	75-0004	74-0006			75-0026
	75-0006	74-0007B			75-0028
	75-0008	74-0020			76-0002
	75-0011	75-0001			77-0003
	75-0024	75-0003			79-0001
	75-0025	75-0004			79-0005
	76-0002	75-0007			80-0001
	77-0001	75-0012			
		75-0024			
		76-0002			
		77-0002			
		81-0013			

BANKS ISLAND SHELF	**CONTINENTAL SLOPE**	**CANADA BASIN**	**WEST OF HERSCHEL ISLAND**	**TUKTOYAKTUK CONTINENTAL SHELF**	
50-0001	50-0001	50-0001	35-0001	35-0001	76-0001
51-0002	51-0001	51-0001	52-0001	50-0001	76-0003
52-0001	51-0002	54-0001	54-0002	51-0001	76-0004
52-0002	52-0001	54-0002	55-0001	51-0002	77-0001
54-0002	52-0002	59-0001	56-0001	52-0001	77-0004
54-0003	54-0001	59-0002	58-0001	52-0002	78-0001
72-0009	54-0002	60-0001	59-0002	54-0003	78-0002
75-0001	54-0003	69-0001	60-0001	56-0001	78-0018
81-0001	55-0001	70-0001	70-0002	57-0001	79-0001
	57-0001	70-0002	72-0001	58-0001	79-0002
	58-0001	70-0003	74-0002	59-0002	79-0003
	59-0001	71-0003	74-0007A	60-0001	79-0007
	59-0002	72-0001	74-0011	60-0002	79-0009
	60-0002	75-0005	74-0019	60-0003	80-0001
	69-0001	79-0001	75-0007	64-0002	80-0002
	70-0002	79-0002	75-0009	69-0001	80-0004
	72-0001	80-0001	75-0025	70-0001	81-0001
	74-0007A	81-0001	77-0004	70-0002	81-0002
	74-0008	81-0006	79-0003	70-0003	81-0016
	75-0001		79-0004	70-0004	
	75-0012			71-0001	
	79-0001			71-0002	
	79-0002			72-0001	
	80-0001			72-0010	
	81-0001			73-0001	
				73-0002	
				74-0001	
				74-0002	
				74-0003	
				74-0004	
				74-0005	
				74-0007A	
				74-0008	
				75-0002	
				75-0006	
				75-0007	
				75-0009	

10.2 MEASUREMENT TYPE

PROFILES OF TEMPERATURE & SALINITY	WATER LEVELS, BOTTOM PRESSURE	EULERIAN CURRENTS	LAGRANGRIAN DRIFT PATHS	TEMPERATURE & SALINITY	
72-0007	55-0002	70-0001	70-0003	35-0001	64-0001
73-0002	61-0002	70-0003	74-0004	37-0001	64-0002
74-0001	64-0003	70-0005	75-0001	50-0001	64-0004
74-0003	65-0001	71-0003	75-0003	51-0001	69-0001
74-0011	66-0001	74-0002	79-0002	51-0002	70-0001
75-0001	66-0002	74-0005	79-0004	52-0001	70-0002
75-0002	70-0004	75-0001	80-0001	52-0002	70-0003
75-0004	71-0002	75-0007		53-0001	71-0001
75-0005	72-0009	76-0001		54-0001	71-0003
76-0001	72-0010	76-0001		54-0002	71-0004
76-0003	73-0004	77-0001		54-0003	72-0001
76-0004	74-0005	77-0004		55-0001	72-0004
77-0001	74-0006	77-0009		56-0001	73-0001
77-0004	75-0007	78-0001		57-0001	73-0003
77-0009	75-0008	79-0003		57-0002	74-0002
78-0001	76-0002	79-0004		58-0001	74-0007A
78-0002	77-0005	81-0001		59-0001	74-0008
78-0018		81-0002		59-0002	74-0010
79-0001		81-0016		60-0001	74-0020
79-0003				60-0002	75-0002
79-0005				60-0003	75-0006
79-0007				61-0001	75-0009
79-0010				62-0001	75-0010
80-0002				62-0002	75-0011
80-0004				63-0001	75-0012
81-0001				63-0002	75-0024
				63-0003	77-0003

10.3 INDEX OF REFERENCES BY DATA SET NUMBER

35-0001	Tully, J.P., 1952. Oceanographic data of the western Canadian Arctic region, 1935-37. J. Fish. Res. Bd. Canada, 8(5), pp.378-82.
37-0001	See 35-0001.
50-0001	U.S. Navy Hydrographic Office, 1954. Oceanographic observations, U.S.S. Burton Island, 1950-1953. H.O. Pub. 618-C, U.S. Navy Hydrographic Office, Washington, D.C. (unpublished manuscript).
51-0001	See 50-0001.
51-0002	Cameron, W.M., 1952. Hydrography and oceanography of the southeast Beaufort Sea and Amundsen Gulf, Part 1: Hydrographic and oceanographic observations in the Beaufort Sea, 1951. University of British Columbia, Institute of Oceanography (unpublished manuscript).
52-0001	Cameron, W.M., 1953. Hydrography and oceanography of the southeast Beaufort Sea and Amundsen Gulf, Part 2: Hydrographic and oceanographic observations in the Beaufort Sea, 1952. University of British Columbia, Institute of Oceanography (unpublished manuscript).
52-0002	See 50-0001.
53-0001	See 50-0001.
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11. LISTINGS OF MEASUREMENT LOCATIONS AND OTHER PARAMETERS

This section gives detailed listings of measurement locations and times for each of the data sets plotted on the maps in Section 9. (Drifter data and data sets whose measurement locations were plotted as shaded areas only are not listed). There are separate listings for temperature-salinity data, current meter data and water level data. Each listing is ordered by data set number. An explanation of the format appears at the start of each listing. Note that only data collected within the area of this inventory is listed here; measurements taken elsewhere may be found in the inventories for those areas.

11.1 TEMPERATURE-SALINITY DATA

The listing tabulates the individual stations taken within each data set. The following information is shown for each station:

Column 1: **CON:** the consecutive station station number, usually assigned by the originator. Gaps may occur in the sequence if a cruise left the inventory area for a period.

Column 2: **STN:** The originator's station name. In some cases, it is the same as the consecutive number.

Column 3: **LAT:** gives the latitude of the station in degrees and decimal minutes.

Column 4: **LON:** gives the longitude of the station in degrees and decimal minutes.

Column 5: **DATE:** gives the date and time (GMT) of the measurement as the last 2 digits of the year, the number of the month, the day of the month and the decimal hour.

Column 6: **CAST TO:** gives the depth of the deepest measurement in metres.

Column 7: **WATER DEPTH:** the sounded depth of the water at the station in metres.

Column 8: **PTS:** the number of measurement points at that station. For bottle cast data it is the number of bottles in the cast. If a profiling instrument such as a CTD was used, the number does not apply and a dash (-) appears.

A dash (-) appears for any entries for which information was not available or which did not apply to a particular data set.

Note: The order in which stations appear is generally chronological or by station number, except for data sets obtained from MEDS (see Table 1) which may be ordered geographically.

BOTTLE /CTD DATA SET NUMBER:50-0001 YEAR: 1950

CON	STN	LAT		LON		DATE				CAST TO (M)	WATER DEPTH (M)	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR			
41	42	71	56.0	125	42.0	50	8	20	14.0	-	71	6
39	40	71	57.0	126	58.0	50	8	20	8.0	-	420	8
42	44	71	54.0	126	32.0	50	8	20	16.0	-	375	8
38	39	71	49.0	127	55.0	50	8	20	6.0	-	420	8
37	38	71	38.0	129	6.0	50	8	20	2.0	-	298	7
40	41	72	2.0	126	17.0	50	8	20	11.0	-	31	4
43	45	72	18.0	126	33.0	50	8	21	20.0	-	34	5
44	46	72	18.0	127	41.0	50	8	21	23.0	-	223	7
45	47	72	25.0	128	45.0	50	8	22	2.0	-	333	8
34	35	70	36.0	135	50.0	50	8	19	14.0	-	73	7
33	34	70	19.0	138	24.0	50	8	19	8.0	-	365	7
36	37	71	31.0	130	2.0	50	8	19	24.0	-	201	7
47	49	71	45.0	131	29.0	50	8	22	16.0	-	878	11
48	50	71	24.0	132	55.0	50	8	22	21.0	-	1280	12
35	36	71	3.0	133	5.0	50	8	19	19.0	-	137	7
49	51	71	50.0	134	26.0	50	8	23	4.0	-	1865	14
50	52	71	38.0	137	16.0	50	8	23	12.0	-	2050	15
46	48	72	4.0	130	1.0	50	8	22	5.0	-	365	8
51	53	72	3.0	137	32.0	50	8	23	20.0	-	2360	13

BOTTLE /CTD DATA SET NUMBER:51-0001 YEAR: 1951

CON	STN	LAT		LON		DATE				CAST TO (M)	WATER DEPTH (M)	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR			
63	63	70	14.0	139	13.0	51	9	14	13.0	400	435	17
64	64	70	17.0	137	42.0	51	9	14	18.0	70	73	10
65	65	70	36.0	136	0.0	51	9	14	23.0	200	206	13
66	66	70	53.0	134	16.0	51	9	15	4.0	95	104	12
67	67	70	58.0	134	26.0	51	9	15	6.0	275	287	14
68	68	71	4.0	134	54.0	51	9	15	7.0	450	457	19
69	69	71	14.0	134	48.0	51	9	15	10.0	925	951	25
70	70	71	28.0	135	6.0	51	9	15	14.0	1555	1646	29
71	71	71	48.0	135	46.0	51	9	15	19.0	900	201	28
72	72	72	21.0	136	33.0	51	9	16	2.0	1417	2551	32
73	73	72	46.0	134	52.0	51	9	16	11.0	1556	2515	29
74	74	72	41.0	132	2.0	51	9	16	19.0	1580	2066	29
75	75	73	41.0	129	42.0	51	9	17	2.0	770	1024	27
76	76	72	24.0	129	25.0	51	9	17	10.0	400	420	15
77	77	72	41.0	128	16.0	51	9	17	14.0	200	212	12
78	78	72	57.0	126	58.0	51	9	17	19.0	130	135	12
79	79	71	29.0	128	32.0	51	9	18	0.0	190	193	16

CON	STN	LAT DEG	LAT MIN	LON DEG	LON MIN	DATE YR	DATE MO	DATE DY	DATE HR	CAST TO (M)	WATER DEPTH (M)	PTS
80	80	71	40.0	126	44.0	51	9	18	14.0	410	426	17
81	81	71	52.0	126	33.0	51	9	18	17.0	173	182	14
82	82	72	0.0	128	54.0	51	9	18	24.0	350	374	16
83	83	71	42.0	130	49.0	51	9	19	7.0	470	549	20
84	84	71	58.0	132	20.0	51	9	19	11.0	1385	1408	24
85	85	72	8.0	134	21.0	51	9	19	17.0	1585	3035	32
86	86	72	30.0	139	46.0	51	9	20	10.0	1500	2999	32
89	89	71	58.0	139	10.0	51	9	20	19.0	1271	2633	27
90	90	71	27.0	139	14.0	51	9	21	1.0	1300	2213	24
91	91	71	1.0	139	37.0	51	9	21	5.0	1245	1975	28
92	92	70	32.0	139	24.0	51	9	21	11.0	800	878	20

BOTTLE /CTD DATA SET NUMBER:51-0002 YEAR: 1951

CON	STN	LAT DEG	LAT MIN	LON DEG	LON MIN	DATE YR	DATE MO	DATE DY	DATE HR	CAST TO (M)	WATER DEPTH (M)	PTS
21	-	69	37.0	117	11.0	51	8	31	16.0	-	182	15
22	-	69	24.0	117	55.0	51	8	31	22.0	-	395	15
23	-	69	14.0	118	26.0	51	9	1	0.0	-	117	12
24	-	69	23.0	119	26.0	51	9	1	6.0	-	85	11
25	-	69	29.0	119	31.0	51	9	1	8.0	-	193	15
26	-	69	54.0	119	50.0	51	9	1	12.0	-	482	16
11	-	69	53.0	134	0.0	51	8	22	11.0	-	9	3
39	-	69	48.0	135	12.0	51	9	12	0.0	-	9	4
1	-	69	32.0	138	49.0	51	8	20	6.0	-	10	4
2	-	69	33.0	138	14.0	51	8	20	9.0	-	115	11
3	-	69	48.0	138	15.0	51	8	20	12.0	-	181	13
4	-	69	58.0	138	32.0	51	8	20	14.0	-	252	13
7	-	69	46.0	139	42.0	51	8	21	2.0	-	34	6
8	-	69	51.0	139	8.0	51	8	21	5.0	-	54	9
34	-	71	0.0	118	43.0	51	9	3	12.0	-	117	12
33	-	71	6.0	119	25.0	51	9	3	9.0	-	153	14
27	-	70	24.0	120	13.0	51	9	1	18.0	-	343	16
37	-	70	50.0	123	40.0	51	9	5	1.0	-	539	17
12	-	70	40.0	128	15.0	51	8	24	21.0	-	20	6
38	-	70	23.0	129	27.0	51	9	6	0.0	-	9	2
28	-	71	2.0	120	40.0	51	9	2	0.0	-	208	14
29	-	71	18.0	120	53.0	51	9	2	3.0	-	120	12
32	-	71	13.0	120	8.0	51	9	3	7.0	-	160	13
30	-	71	23.0	121	28.0	51	9	2	7.0	-	10	4
31	-	71	19.0	121	16.0	51	9	3	1.0	-	32	8
35	-	71	4.0	122	48.0	51	9	4	19.0	-	10	3

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO (M)	DEPTH (M)	
36	-	71	1.0	123	1.0	51	9	4	21.0	-	250	15
15	-	71	52.0	125	19.0	51	8	25	13.0	-	131	12
20	-	71	39.0	125	21.0	51	8	28	11.0	-	263	15
14	-	71	30.0	126	12.0	51	8	25	8.0	-	455	17
19	-	71	53.0	126	0.0	51	8	27	11.0	-	12	4
13	-	71	6.0	127	13.0	51	8	25	3.0	-	217	15
18	-	72	41.0	125	34.0	51	8	27	0.0	-	18	5
16	-	72	51.0	127	4.0	51	8	26	2.0	-	175	14
17	-	73	21.0	126	0.0	51	8	26	11.0	-	95	12
40	-	70	4.0	135	39.0	51	9	12	4.0	-	36	8
41	-	70	24.0	136	15.0	51	9	12	8.0	-	54	10
42	-	70	36.0	136	38.0	51	9	12	11.0	-	731	16
10	-	70	7.0	137	30.0	51	8	21	13.0	-	49	9
5	-	70	8.0	138	49.0	51	8	20	16.0	-	358	15
9	-	70	4.0	138	6.0	51	8	21	10.0	-	201	15
43	-	70	15.0	138	12.0	51	9	15	19.0	-	356	15
6	-	70	21.0	139	8.0	51	8	20	21.0	-	577	18

BOTTLE /CTD DATA SET NUMBER:52-0001 YEAR: 1952

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO (M)	DEPTH (M)	
35	-	69	40.4	132	59.0	52	7	27	8.0	-	5	3
36	-	69	49.9	132	42.9	52	7	27	17.0	-	10	4
37	-	69	52.5	132	15.9	52	7	27	19.0	-	14	5
1	-	69	39.6	133	12.5	52	7	18	22.0	-	5	3
2	-	69	39.6	133	12.5	52	7	19	5.0	-	5	3
3	-	69	39.6	133	12.5	52	7	19	11.0	-	5	3
4	-	69	39.6	133	12.5	52	7	19	15.0	-	5	3
5	-	69	39.6	133	12.5	52	7	19	20.0	-	5	3
6	-	69	39.6	133	12.5	52	7	20	0.0	-	5	3
7	-	69	36.9	133	.4	52	7	20	1.0	-	7	3
8	-	69	42.2	133	11.2	52	7	20	2.0	-	7	3
9	-	69	48.6	133	3.5	52	7	20	3.0	-	7	3
10	-	69	48.3	133	18.5	52	7	20	4.0	-	10	4
11	-	69	43.5	133	29.5	52	7	20	7.0	-	16	4
14	-	69	44.0	133	45.0	52	7	20	13.0	-	5	3
18	-	69	47.2	133	42.0	52	7	21	9.0	-	5	3
19	-	69	44.6	133	26.0	52	7	21	10.0	-	7	3
20	-	69	42.1	133	10.8	52	7	21	11.0	-	7	3
21	-	69	37.7	133	59.9	52	7	21	12.0	-	10	3
22	-	69	34.8	133	9.0	52	7	21	13.0	-	5	3

CON	STN	LAT DEG	 MIN	LON DEG	 MIN	DATE YR	 MO	 DY	 HR	CAST TO (M)	WATER DEPTH (M)	PTS
23	-	69	27.3	133	2.2	52	7	25	17.0	-	10	4
24	-	69	27.3	133	2.2	52	7	25	21.0	-	5	4
25	-	69	29.0	133	7.1	52	7	26	17.0	-	5	3
26	-	69	32.0	133	11.1	52	7	26	18.0	-	3	3
27	-	69	34.9	133	12.0	52	7	26	18.0	-	3	3
28	-	69	39.0	133	17.5	52	7	26	19.0	-	3	3
29	-	69	40.0	133	32.5	52	7	26	21.0	-	5	3
30	-	69	40.0	133	47.9	52	7	26	21.0	-	5	3
32	-	69	47.9	133	56.0	52	7	27	3.0	-	5	3
33	-	69	43.8	133	47.3	52	7	27	5.0	-	5	3
34	-	69	40.7	133	16.0	52	7	27	7.0	-	5	3
72	-	69	39.0	133	12.0	52	8	8	7.0	-	5	3
84	-	69	57.7	133	22.9	52	8	9	22.0	-	21	6
125	-	69	41.4	133	28.8	52	8	17	16.0	-	9	4
126	-	69	38.3	133	10.0	52	8	17	18.0	-	5	3
127	-	69	38.7	133	11.8	52	8	19	5.0	-	5	3
128	-	69	56.4	133	12.8	52	8	19	8.0	-	20	6
164	-	69	58.0	133	25.0	52	8	25	9.0	-	20	6
177	-	69	41.1	133	11.7	52	8	29	14.0	-	5	3
178	-	69	57.0	133	11.0	52	8	29	17.0	-	18	5
12	-	69	50.2	134	11.0	52	7	20	10.0	-	7	3
13	-	69	45.5	134	31.5	52	7	20	12.0	-	7	3
15	-	69	45.0	134	45.0	52	7	21	2.0	-	5	3
16	-	69	49.2	134	16.9	52	7	21	7.0	-	7	4
17	-	69	49.8	134	58.0	52	7	21	8.0	-	5	3
31	-	69	40.0	134	2.0	52	7	27	1.0	-	7	2
85	-	69	52.1	134	17.5	52	8	10	0.0	-	9	4
124	-	69	53.2	134	10.6	52	8	17	14.0	-	9	4
165	-	69	53.8	134	30.0	52	8	25	12.0	-	10	4
86	-	69	49.4	135	7.0	52	8	10	3.0	-	12	5
122	-	69	42.3	135	45.5	52	8	17	10.0	-	9	4
123	-	69	49.5	135	6.0	52	8	17	12.0	-	12	4
166	-	69	50.8	135	5.7	52	8	25	14.0	-	12	4
167	-	69	43.7	135	49.6	52	8	25	16.0	-	7	4
107	-	69	30.5	136	26.0	52	8	15	21.0	-	7	4
108	-	69	25.8	136	45.0	52	8	15	22.0	-	7	4
120	-	69	30.4	136	55.5	52	8	17	5.0	-	20	6
121	-	69	32.1	136	15.0	52	8	17	7.0	-	7	3
168	-	69	32.3	136	18.6	52	8	25	18.0	-	7	4
192	-	69	39.4	136	41.0	52	8	31	11.0	-	14	4
93	-	69	45.3	137	1.3	52	8	11	10.0	-	31	7
94	-	69	30.1	137	4.0	52	8	11	12.0	-	18	5
95	-	69	30.7	137	45.5	52	8	11	14.0	-	58	10
98	-	69	18.8	137	24.0	52	8	14	10.0	-	14	5
99	-	69	31.0	137	1.0	52	8	14	14.0	-	18	5
100	-	69	31.0	137	1.0	52	8	14	18.0	-	18	5

CON	STN	LAT DEG	LAT MIN	LON DEG	LON MIN	DATE YR	MO	DY	HR	CAST TO (M)	WATER DEPTH (M)	PTS
101	-	69	31.0	137	1.0	52	8	14	23.0	-	18	5
102	-	69	31.0	137	1.0	52	8	15	2.0	-	18	5
103	-	69	31.0	137	1.0	52	8	15	7.0	-	18	5
104	-	69	31.0	137	1.0	52	8	15	11.0	-	18	5
105	-	69	31.0	137	1.0	52	8	15	14.0	-	18	5
106	-	69	31.0	137	1.0	52	8	15	18.0	-	18	5
109	-	69	18.0	137	14.5	52	8	16	0.0	-	16	5
110	-	69	11.3	137	40.0	52	8	16	2.0	-	23	6
111	-	69	15.1	137	58.0	52	8	16	3.0	-	36	8
119	-	69	30.4	137	46.9	52	8	17	3.0	-	45	9
169	-	69	32.9	137	12.6	52	8	25	21.0	-	36	8
170	-	69	33.3	137	58.8	52	8	25	23.0	-	67	11
191	-	69	50.2	137	28.2	52	8	31	8.0	-	56	10
193	-	69	30.0	137	52.6	52	8	31	15.0	-	51	9
96	-	69	31.3	138	48.0	52	8	11	17.0	-	14	5
97	-	69	25.0	138	14.0	52	8	14	7.0	-	56	10
112	-	69	23.2	138	21.5	52	8	16	5.0	-	29	7
113	-	69	26.0	138	45.8	52	8	16	7.0	-	16	5
114	-	69	44.0	138	50.0	52	8	16	9.0	-	87	11
115	-	69	56.8	138	52.5	52	8	16	12.0	-	204	14
116	-	69	24.0	138	48.9	52	8	16	18.0	-	78	12
117	-	69	30.8	138	15.3	52	8	17	0.0	-	16	5
118	-	69	45.0	138	23.0	52	8	17	1.0	-	148	14
171	-	69	34.0	138	22.0	52	8	26	0.0	-	102	12
172	-	69	32.5	138	47.0	52	8	26	2.0	-	10	4
173	-	69	48.7	138	20.0	52	8	26	6.0	-	170	14
190	-	69	48.3	138	16.8	52	8	31	5.0	-	175	15
194	-	69	29.9	138	24.2	52	8	31	16.0	-	80	11
195	-	69	32.1	138	44.5	52	8	31	18.0	-	12	5
189	-	69	44.5	139	9.0	52	8	31	2.0	-	36	9
52	-	70	45.0	127	57.5	52	7	30	20.0	-	62	11
53	-	70	56.3	127	28.0	52	7	30	23.0	-	149	14
43	-	70	40.0	128	10.0	52	7	28	9.0	-	21	6
44	-	70	40.0	128	10.0	52	7	28	13.0	-	23	6
45	-	70	40.0	128	10.0	52	7	28	15.0	-	23	6
46	-	70	40.0	128	10.0	52	7	28	18.0	-	23	6
47	-	70	40.0	128	10.0	52	7	28	23.0	-	23	6
48	-	70	40.0	128	10.0	52	7	29	1.0	-	23	6
49	-	70	40.0	128	10.0	52	7	29	5.0	-	23	6
50	-	70	31.0	128	19.0	52	7	30	7.0	-	5	3
51	-	70	39.8	128	10.5	52	7	30	19.0	-	21	6
143	-	70	42.8	128	31.0	52	8	22	0.0	-	18	5
144	-	70	39.2	128	17.4	52	8	22	1.0	-	21	6
145	-	70	41.4	128	14.4	52	8	22	19.0	-	27	7
146	-	70	47.4	128	3.2	52	8	22	21.0	-	47	10
41	-	70	29.8	129	43.9	52	7	28	4.0	-	14	5

CON	STN	LAT		LON		DATE				CAST TO (M)	WATER DEPTH (M)	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR			
42	-	70	38.0	129	0.0	52	7	28	6.0	-	16	5
56	-	71	31.8	125	56.4	52	7	31	11.0	-	365	19
57	-	71	43.2	125	27.0	52	7	31	14.0	-	219	16
58	-	71	48.2	125	13.0	52	7	31	16.0	-	179	15
59	-	71	56.8	125	58.5	52	7	31	19.0	-	25	6
60	-	71	56.8	125	58.5	52	8	2	18.0	-	21	6
61	-	71	57.8	125	59.0	52	8	2	19.0	-	21	4
151	-	71	51.2	125	52.8	52	8	23	13.0	-	166	15
152	-	71	56.8	125	52.2	52	8	23	14.0	-	18	5
54	-	71	8.1	126	58.1	52	7	31	2.0	-	277	16
55	-	71	20.1	126	27.9	52	7	31	6.0	-	427	17
62	-	71	57.2	126	0.0	52	8	2	20.0	-	21	6
63	-	71	54.0	126	.5	52	8	2	21.0	-	151	11
64	-	71	54.7	126	35.5	52	8	2	23.0	-	212	15
149	-	71	26.5	126	50.8	52	8	23	6.0	-	409	19
150	-	71	38.6	126	21.8	52	8	23	10.0	-	351	19
153	-	71	58.3	126	2.8	52	8	23	15.0	-	12	5
154	-	71	58.5	126	18.8	52	8	23	18.0	-	29	7
155	-	71	59.0	126	54.0	52	8	23	20.0	-	219	17
65	-	71	54.8	127	10.5	52	8	3	1.0	-	402	20
66	-	71	54.2	127	43.0	52	8	3	4.0	-	380	20
147	-	71	.4	127	38.9	52	8	22	23.0	-	117	13
148	-	71	13.4	127	16.0	52	8	23	1.0	-	248	17
67	-	71	55.5	128	16.0	52	8	3	7.0	-	373	19
140	-	71	55.0	128	26.0	52	8	21	13.0	-	391	19
141	-	71	32.0	128	29.0	52	8	21	18.0	-	182	15
142	-	71	.5	128	32.0	52	8	21	22.0	-	40	9
135	-	71	13.4	129	5.2	52	8	20	12.0	-	80	11
136	-	71	37.1	129	29.0	52	8	20	15.0	-	299	18
137	-	71	49.5	129	33.3	52	8	20	19.0	-	453	20
156	-	72	0.0	127	48.0	52	8	23	23.0	-	373	19
68	-	72	5.8	128	16.2	52	8	3	11.0	-	365	19
69	-	72	16.0	128	17.0	52	8	3	14.0	-	336	15
70	-	72	26.3	128	17.3	52	8	3	17.0	-	277	18
71	-	72	51.2	128	17.7	52	8	3	22.0	-	373	18
138	-	72	0.0	128	59.0	52	8	21	1.0	-	352	19
139	-	72	30.0	129	0.0	52	8	21	6.0	-	395	19
157	-	72	1.1	129	33.2	52	8	24	4.0	-	362	17
40	-	70	23.3	130	16.9	52	7	28	1.0	-	14	5
80	-	70	41.3	130	45.9	52	8	9	11.0	-	32	5
81	-	70	21.1	130	42.9	52	8	9	13.0	-	18	5
82	-	70	14.2	130	59.8	52	8	9	15.0	-	14	5
162	-	70	13.3	130	56.2	52	8	25	2.0	-	10	4
38	-	70	3.8	131	40.2	52	7	27	21.0	-	14	5
39	-	70	11.8	131	3.1	52	7	27	23.0	-	14	5
83	-	70	5.9	131	50.4	52	8	9	18.0	-	20	6

CON	STN	LAT		LON		DATE				CAST TO (M)	WATER DEPTH (M)	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR			
160	-	70	52.2	131	41.2	52	8	24	19.0	-	54	10
161	-	70	33.0	131	47.4	52	8	24	22.0	-	36	7
75	-	70	44.8	132	58.8	52	8	8	15.0	-	58	10
163	-	70	5.0	132	2.0	52	8	25	5.0	-	20	5
73	-	70	.7	133	8.6	52	8	8	10.0	-	18	5
74	-	70	22.5	133	5.3	52	8	8	12.0	-	32	8
129	-	70	15.8	133	13.2	52	8	19	11.0	-	38	8
130	-	70	36.4	133	14.0	52	8	19	14.0	-	58	10
131	-	70	55.4	133	15.0	52	8	19	18.0	-	109	12
179	-	70	17.0	133	10.1	52	8	29	20.0	-	31	8
180	-	70	37.0	133	2.8	52	8	29	23.0	-	51	9
181	-	70	37.5	134	40.0	52	8	30	3.0	-	53	9
182	-	70	47.5	134	39.2	52	8	30	4.0	-	69	11
87	-	70	10.0	135	6.9	52	8	10	5.0	-	49	10
88	-	70	30.6	135	6.9	52	8	10	8.0	-	56	10
89	-	70	45.6	135	5.0	52	8	10	12.0	-	87	11
90	-	70	10.5	135	56.1	52	8	10	19.0	-	47	9
183	-	70	47.8	135	24.8	52	8	30	7.0	-	391	18
184	-	70	30.5	135	56.0	52	8	30	10.0	-	58	10
91	-	70	.5	136	58.0	52	8	11	0.0	-	43	8
92	-	70	18.4	136	56.7	52	8	11	4.0	-	228	17
185	-	70	15.9	136	22.8	52	8	30	13.0	-	51	10
186	-	70	16.3	137	51.8	52	8	30	17.0	-	120	12
174	-	70	.8	138	40.0	52	8	26	9.0	-	263	17
175	-	70	12.2	138	58.0	52	8	26	12.0	-	380	19
187	-	70	8.6	138	44.5	52	8	30	21.0	-	338	19
176	-	70	22.4	139	15.0	52	8	26	16.0	-	621	14
188	-	70	3.8	139	18.8	52	8	30	23.0	-	113	12
79	-	71	1.2	130	48.7	52	8	9	7.0	-	45	8
134	-	71	7.6	130	58.7	52	8	20	7.0	-	106	12
78	-	71	22.0	131	8.4	52	8	9	3.0	-	466	20
133	-	71	20.0	131	26.0	52	8	20	3.0	-	731	21
158	-	71	31.3	131	30.0	52	8	24	13.0	-	594	20
159	-	71	11.8	131	36.0	52	8	24	16.0	-	73	11
76	-	71	5.8	132	54.7	52	8	8	18.0	-	173	15
77	-	71	15.6	132	4.9	52	8	8	22.0	-	193	15
132	-	71	6.8	133	16.2	52	8	19	21.0	-	731	21

BOTTLE /CTD DATA SET NUMBER:52-0002 YEAR: 1952

CON	STN	LAT DEG	LAT MIN	LON DEG	LON MIN	DATE YR	DATE MO	DATE DY	DATE HR	CAST TO (M)	WATER DEPTH (M)	PTS
11	11	71	57.0	125	49.0	52	9	2	18.0	10	27	3
12	12	73	50.0	124	40.0	52	9	4	14.0	27	54	6
13	13	74	13.0	125	10.0	52	9	5	2.0	28	54	6
14	14	74	17.0	125	42.0	52	9	5	4.0	225	433	11
15	15	74	20.0	125	48.0	52	9	5	8.0	296	567	18
16	16	74	24.0	125	43.0	52	9	5	12.0	350	664	14
17	17	74	2.0	126	38.0	52	9	5	18.0	155	301	10
18	18	74	5.0	127	13.0	52	9	5	21.0	245	664	15
19	19	73	48.0	126	52.0	52	9	6	1.0	170	363	9
20	20	73	41.0	128	0.0	52	9	6	6.0	400	786	13
21	21	73	44.0	128	33.0	52	9	6	13.0	900	1748	17
22	22	72	37.0	126	4.0	52	9	7	5.0	38	78	8
23	23	73	16.0	128	25.0	52	9	7	15.0	343	665	15
24	24	72	4.0	128	57.0	52	9	7	20.0	367	743	15
25	25	71	45.0	129	32.0	52	9	8	1.0	285	567	14
26	26	71	56.0	125	48.0	52	9	8	16.0	18	38	4
27	27	71	2.0	130	20.0	52	9	9	13.0	38	75	8
28	28	70	26.0	132	36.0	52	9	9	20.0	38	76	8
29	29	70	14.0	134	57.0	52	9	10	1.0	40	78	8
30	30	70	13.0	137	26.0	52	9	10	6.0	58	113	10
31	31	70	14.0	139	37.0	52	9	10	22.0	360	698	13

BOTTLE /CTD DATA SET NUMBER:53-0001 YEAR: 1953

CON	STN	LAT DEG	LAT MIN	LON DEG	LON MIN	DATE YR	DATE MO	DATE DY	DATE HR	CAST TO (M)	WATER DEPTH (M)	PTS
1	1	70	45.0	127	33.0	53	8	8	5.0	150	188	14
2	2	70	13.0	124	35.0	53	8	8	24.0	60	69	10
3	3	70	39.0	124	10.0	53	8	9	5.0	400	429	16
4	4	70	50.0	123	24.0	53	8	9	11.0	446	487	16
5	5	71	2.0	122	57.0	53	8	9	14.0	148	190	14
6	6	71	4.0	122	45.0	53	8	9	19.0	21	21	7
7	7	71	6.0	122	29.0	53	8	9	24.0	23	24	6
8	8	71	22.0	120	32.0	53	8	11	10.0	45	50	10
9	9	71	28.0	120	9.0	53	8	11	12.0	140	105	14
10	10	71	32.0	119	46.0	53	8	11	14.0	125	135	13
11	11	71	34.0	119	11.0	53	8	11	23.0	17	19	6
12	12	71	59.0	120	2.0	53	8	14	8.0	20	23	6
13	13	71	50.0	118	54.0	53	8	15	12.0	25	66	7
14	14	71	55.0	119	32.0	53	8	15	15.0	90	97	12
31	31	71	58.0	120	13.0	53	8	25	8.0	70	75	10

CON	STN	LAT DEG	LAT MIN	LON DEG	LON MIN	DATE YR	DATE MO	DATE DY	DATE HR	CAST TO (M)	WATER DEPTH (M)	PTS
32	32	71	56.0	119	38.0	53	8	25	10.0	115	120	12
33	33	71	53.0	119	8.0	53	8	25	12.0	20	26	5
34	34	71	38.0	119	10.0	53	8	25	14.0	18	21	5
35	35	71	31.0	119	50.0	53	8	25	22.0	145	150	13
36	36	71	28.0	120	35.0	53	8	25	24.0	75	80	10

BOTTLE /CTD DATA SET NUMBER:54-0001 YEAR: 1954

CON	STN	LAT DEG	LAT MIN	LON DEG	LON MIN	DATE YR	DATE MO	DATE DY	DATE HR	CAST TO (M)	WATER DEPTH (M)	PTS
94	-	69	55.0	138	57.0	54	9	14	6.0	-	183	8
80	-	71	34.0	119	46.0	54	9	6	16.0	-	144	8
81	-	71	34.0	119	27.0	54	9	6	17.0	-	88	6
82	-	71	34.0	120	0.0	54	9	6	18.0	-	165	8
83	-	71	33.0	120	16.0	54	9	6	19.0	-	119	7
84	-	71	27.0	121	35.0	54	9	7	17.0	-	55	5
85	-	71	58.0	127	21.0	54	9	12	7.0	-	399	10
86	-	71	49.0	128	1.0	54	9	12	11.0	-	421	10
87	-	71	41.0	129	18.0	54	9	12	16.0	-	320	10
92	-	70	55.0	137	52.0	54	9	13	19.0	-	1573	17
93	-	70	35.0	139	0.0	54	9	13	23.0	-	1006	16
88	-	71	49.0	130	30.0	54	9	12	19.0	-	503	11
89	-	71	52.0	131	40.0	54	9	12	22.0	-	1189	15
90	-	71	15.0	132	0.0	54	9	13	2.0	-	274	10
91	-	71	16.0	134	28.0	54	9	13	8.0	-	1006	14

BOTTLE /CTD DATA SET NUMBER:54-0002 YEAR: 1954

CON	STN	LAT DEG	LAT MIN	LON DEG	LON MIN	DATE YR	DATE MO	DATE DY	DATE HR	CAST TO (M)	WATER DEPTH (M)	PTS
2	2	69	44.0	139	40.0	54	8	8	8.0	30	32	6
3	3	70	44.0	127	0.0	54	8	9	16.0	197	219	15
4	4	70	52.0	125	0.0	54	8	9	21.0	254	332	18
5	5	71	0.0	123	5.0	54	8	10	5.0	92	117	13
6	6	70	57.0	123	10.0	54	8	10	6.0	97	195	11
45	45	71	36.0	119	50.0	54	9	6	18.0	97	195	11
46	46	70	37.0	121	26.0	54	9	7	1.0	449	453	19
47	47	71	15.0	125	22.0	54	9	7	11.0	232	303	16

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO (M)	DEPTH (M)	
48	48	73	48.0	126	6.0	54	9	10	9.0	50	58	8
49	49	73	36.0	125	14.0	54	9	10	14.0	25	25	6
50	50	73	31.0	126	21.0	54	9	10	17.0	80	82	10
51	51	72	57.0	125	18.0	54	9	11	5.0	15	16	4
52	52	72	57.0	126	27.0	54	9	11	8.0	69	69	10
53	53	72	57.0	127	36.0	54	9	11	10.0	140	153	14
54	54	72	57.0	129	0.0	54	9	11	12.0	329	334	18
55	55	72	57.0	129	55.0	54	9	11	15.0	571	640	22
56	56	72	45.0	127	14.0	54	9	11	19.0	86	91	11
57	57	72	23.0	126	36.0	54	9	11	22.0	20	22	5
58	58	72	0.0	126	7.0	54	9	12	1.0	25	30	6
59	59	71	39.0	126	42.0	54	9	12	7.0	419	448	22
60	60	71	16.0	127	12.0	54	9	12	10.0	296	298	17
61	61	70	53.0	127	48.0	54	9	12	12.0	110	140	11
62	62	70	41.0	128	8.0	54	9	12	14.0	15	16	4
63	63	70	10.0	132	0.0	54	9	12	22.0	22	23	6
64	64	70	38.0	132	0.0	54	9	12	24.0	37	38	8
65	65	70	59.0	134	42.0	54	9	13	8.0	354	365	19
66	66	70	33.0	134	46.0	54	9	13	11.0	24	55	6
67	67	70	10.0	134	44.0	54	9	13	13.0	24	27	6
68	68	70	20.0	134	57.0	54	9	13	18.0	47	54	9
69	69	69	45.0	137	3.0	54	9	13	23.0	2	28	6

BOTTLE /CTD DATA SET NUMBER:54-0003 YEAR: 1954

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO (M)	DEPTH (M)	
1	1	70	45.0	128	0.0	54	8	9	15.0	40	53	9
2	2	71	22.0	126	31.0	54	8	9	21.0	400	457	16
3	3	71	46.0	125	14.0	54	8	10	2.0	100	457	11
4	4	71	54.0	125	22.0	54	8	10	4.0	25	33	8
5	5	71	57.0	125	55.0	54	8	10	5.0	10	15	6
6	6	74	19.0	125	8.0	54	8	12	22.0	30	37	9
7	7	74	27.0	125	1.0	54	8	14	2.0	280	298	13
25	25	72	5.0	119	0.0	54	9	5	13.0	40	44	8
26	26	72	1.0	119	42.0	54	9	6	15.0	90	104	11
27	27	71	58.0	119	8.0	54	9	6	16.0	40	50	8
28	28	71	3.0	123	1.0	54	9	7	2.0	60	101	8
29	29	71	0.0	123	14.0	54	9	7	3.0	250	271	13
30	30	70	50.0	123	32.0	54	9	7	5.0	394	466	17
31	31	70	38.0	123	53.0	54	9	7	8.0	388	472	18
32	32	70	27.0	124	10.0	54	9	7	10.0	298	326	15

CON	STN	LAT DEG	LAT MIN	LON DEG	LON MIN	DATE YR	DATE MO	DATE DY	DATE HR	CAST TO (M)	WATER DEPTH (M)	PTS
33	33	74	26.0	125	1.0	54	9	9	19.0	40	57	8
34	34	74	26.0	125	1.0	54	9	9	22.0	40	57	8
35	35	73	58.0	125	25.0	54	9	10	11.0	25	38	6
36	36	73	48.0	124	53.0	54	9	10	13.0	20	27	6

BOTTLE /CTD DATA SET NUMBER:55-0001 YEAR: 1955

CON	STN	LAT DEG	LAT MIN	LON DEG	LON MIN	DATE YR	DATE MO	DATE DY	DATE HR	CAST TO (M)	WATER DEPTH (M)	PTS
26	-	69	51.0	138	41.0	55	8	27	99.9	132	183	9
31	-	69	40.0	140	15.0	55	9	4	99.9	20	25	5
27	-	70	12.0	138	35.0	55	8	27	99.9	301	329	7

BOTTLE /CTD DATA SET NUMBER:56-0001 YEAR: 1956

CON	STN	LAT DEG	LAT MIN	LON DEG	LON MIN	DATE YR	DATE MO	DATE DY	DATE HR	CAST TO (M)	WATER DEPTH (M)	PTS
9	-	69	46.0	138	13.0	56	7	30	0.0	150	168	8
10	-	69	56.0	134	3.0	56	7	30	24.0	10	12	2
11	-	70	11.0	124	40.0	56	7	31	22.0	15	18	2
12	-	69	2.0	115	55.0	56	8	4	3.0	20	20	3
25	-	69	58.0	139	18.0	56	8	27	21.0	50	69	5

BOTTLE /CTD DATA SET NUMBER:57-0001 YEAR: 1957

CON	STN	LAT DEG	LAT MIN	LON DEG	LON MIN	DATE YR	DATE MO	DATE DY	DATE HR	CAST TO (M)	WATER DEPTH (M)	PTS
2	-	70	3.0	121	49.0	57	7	23	99.9	350	350	14
1	-	70	45.0	125	33.0	57	7	17	99.9	394	421	15

BOTTLE /CTD DATA SET NUMBER:57-0002 YEAR: 1957

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO (M)	DEPTH (M)	
22	-	71	0.0	128	30.0	57	8	14	20.0	-	44	7
7	-	69	45.0	138	15.0	57	8	4	—	150	164	10
25	-	69	46.0	138	14.0	57	8	18	—	150	170	10
23	-	70	10.0	124	46.0	57	8	16	—	30	-	6
3	-	71	5.0	128	30.0	57	8	3	—	45	53	5
4	-	71	29.0	128	9.0	57	8	3	—	60	70	8
24	-	70	15.0	134	0.0	57	8	18	—	40	49	7
6	-	70	15.0	136	1.0	57	8	4	—	40	50	7
5	-	71	50.0	130	1.0	57	8	3	—	300	307	11

BOTTLE /CTD DATA SET NUMBER:58-0001 YEAR: 1958

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO (M)	DEPTH (M)	
4	35	70	50.0	129	0.0	58	9	2	11.0	30	-	6
5	36	71	26.0	128	30.0	58	9	2	16.0	150	177	10
6	37	71	55.0	127	30.0	58	9	3	0.0	150	402	10
7	34	70	25.0	134	0.0	58	9	3	14.0	41	48	7
8	33	69	50.0	138	15.0	58	9	3	21.0	150	172	10
9	32	69	55.0	140	58.0	58	9	4	6.0	40	—	7

BOTTLE /CTD DATA SET NUMBER:59-0001 YEAR: 1959

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO (M)	DEPTH (M)	
1	1	72	20.0	130	35.0	59	6	9	22.3	15	980	2
2	2	72	17.0	130	30.0	59	6	11	1.5	882	890	4
3	3	72	15.0	130	25.0	59	6	11	23.8	660	680	13
4	4	72	4.0	130	57.0	59	6	18	.5	340	780	14
5	5	71	50.8	132	27.0	59	6	30	19.3	1374	1480	24
5	5A	71	57.3	132	30.0	59	7	9	20.7	15	1457	6
6	6	71	44.0	132	32.0	59	7	13	21.3	1372	1400	24
6	6A	71	40.0	133	14.0	59	7	23	22.0	1265	—	6
7	7	71	33.0	133	25.0	59	7	24	21.4	1275	—	24
8	8	71	23.0	134	21.0	59	7	5	21.9	1000	1027	23
9	9	71	26.0	135	30.0	59	8	24	22.3	1200	1362	23
10	10	71	43.0	136	48.0	59	9	9	22.3	2058	—	5

BOTTLE /CTD DATA SET NUMBER:59-0002 YEAR: 1959

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO (M)	DEPTH (M)	
13	13A	73	10.0	129	48.0	59	8	10	20.0	1087	1138	24
15	15A	69	1.0	116	47.0	59	8	25	17.0	134	163	12
16	16A	69	12.0	116	39.0	59	8	25	19.0	205	218	12
17	17A	69	19.0	116	30.0	59	8	25	21.0	215	223	12
18	37	71	53.0	127	32.0	59	8	29	4.0	398	421	14
19	36	71	25.0	128	19.0	59	8	29	8.0	190	198	12
20	35	70	50.0	129	0.0	59	8	29	11.0	35	35	9
21	34	70	31.0	133	56.0	59	8	29	20.0	50	55	9
22	22A	70	26.0	131	56.0	59	9	1	23.0	29	38	8
22	22A	70	26.0	131	56.0	59	9	1	23.0	29	38	8
23	23A	70	49.0	132	42.0	59	9	2	2.0	55	57	10
24	24A	71	19.0	133	38.0	59	9	2	6.0	920	933	23
25	25A	71	19.0	136	12.0	59	9	2	14.0	1200	1189	24
26	26A	71	8.0	135	45.0	59	9	2	21.0	500	555	18
27	27A	70	48.0	136	52.0	59	9	3	3.0	740	850	74
28	33	70	2.0	138	9.0	59	9	3	10.0	180	192	12
29	32	69	56.0	140	52.0	59	9	3	14.0	35	41	8

BOTTLE /CTD DATA SET NUMBER:60-0001   YEAR: 1960

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO (M)	DEPTH (M)	
11	11	70	46.0	140	14.0	60	8	16	20.0	1178	1600	18
12	12	71	15.0	139	6.0	60	8	17	4.0	2000	1975	20
13	13	71	3.0	138	12.0	60	8	17	12.0	1744	1829	20
14	14	71	14.0	136	45.0	60	8	17	22.0	1496	1554	19
15	15	71	11.0	134	56.0	60	8	18	15.0	1200	914	19
16	16	71	27.0	132	50.0	60	8	19	5.0	1200	1280	19
17	17	71	7.0	130	51.0	60	8	19	12.0	58	63	8
18	18	71	55.0	127	33.0	60	8	19	23.0	200	221	12
19	19	71	26.0	128	18.0	60	8	20	3.0	263	265	12
20	20	71	52.0	129	2.0	60	8	20	7.0	28	26	7
25	25	73	43.0	126	41.0	60	9	7	6.0	105	111	11
26	26	74	7.0	126	20.0	60	9	7	22.0	300	338	12
27	27	74	20.0	127	24.0	60	9	8	3.0	385	384	12
28	28	74	23.0	128	36.0	60	9	8	18.0	375	395	12
29	29	74	9.0	131	8.0	60	9	9	7.0	2600	2642	22
30	30	74	53.0	135	18.0	60	9	10	4.0	3350	3365	23
31	31	75	12.0	137	24.0	60	9	11	8.0	3500	3512	23
32	32	74	47.0	134	48.0	60	9	16	7.0	3306	3383	23
33	33	72	43.0	127	29.0	60	9	18	6.0	175	183	12
34	34	71	59.0	127	29.0	60	9	18	11.0	380	402	13
35	35	70	7.0	132	2.0	60	9	18	22.0	25	28	6
36	36	69	56.0	140	14.0	60	9	19	21.0	48	48	8

BOTTLE /CTD DATA SET NUMBER:60-0002   YEAR: 1960

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO (M)	DEPTH (M)	
13		69	47.5	138	38.0	60	10	20	99.9	180	183	11
18		69	47.2	138	38.0	60	10	21	99.9	44	44	10
17		70	31.0	132	42.0	60	10	21	99.9	30	40	8
16		70	27.0	133	54.0	60	10	21	99.9	60	60	10
15		70	16.0	135	39.0	60	10	20	99.9	54	55	9
14		70	6.0	137	25.0	60	10	20	99.9	58	60	8
19		71	1.0	135	21.0	60	10	21	99.9	517	564	19

BOTTLE /CTD DATA SET NUMBER:60-0003 YEAR: 1960

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO	DEPTH	
										(M)	(M)	
1	1005	69	34.3	138	53.9	60	8	1	0.0	1	2	1
2	1010	69	31.2	139	4.5	60	8	3	0.0	7	9	5
3	1013	69	38.0	138	35.0	60	8	6	0.0	76	91	7
4	1020	69	31.9	138	56.3	60	8	10	0.0	4	4	3
5	1024	69	34.0	138	51.0	60	8	11	0.0	7	8	4
6	1036	69	32.0	138	57.0	60	8	25	0.0	20	36	5
7	1045	69	7.0	137	54.0	60	8	31	0.0	22	22	6

BOTTLE /CTD DATA SET NUMBER:61-0001 YEAR: 1961

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO	DEPTH	
										(M)	(M)	
2	1009	69	43.5	132	48.0	61	7	6	18.2	6	7	2
3	1010	69	39.0	132	48.0	61	7	6	21.5	4	5	2
4	1011	69	58.0	128	54.5	61	7	9	23.0	0	0	1
5	1012	69	56.0	128	53.0	61	7	10	10.0	1	2	1
6	1013	69	58.0	128	54.5	61	7	10	20.0	0	2	1
7	1015	70	11.0	128	35.0	61	7	10	23.6	12	12	3
8	1016	70	29.5	128	19.0	61	7	11	9.7	8	8	3
9	1017	70	23.6	128	49.0	61	7	11	13.2	12	13	3
10	1018	69	58.7	129	30.0	61	7	12	3.0	0	2	1
11	1019	69	58.7	129	30.0	61	7	12	9.7	3	3	2
12	1020	69	58.7	129	30.0	61	7	12	14.0	0	3	1
13	1021	69	56.0	129	37.0	61	7	13	1.6	10	11	3
14	1072	69	41.0	130	34.0	61	8	12	.6	5	6	2
15	1073	69	45.0	130	24.0	61	8	12	1.9	7	7	2
16	1074	69	47.5	130	18.0	61	8	14	2.0	8	9	3
17	1079	69	42.8	132	34.0	61	8	17	19.0	0	3	1
18	1082	70	13.0	132	36.0	61	8	19	7.9	28	34	4
19	1083	69	42.8	132	34.0	61	8	24	3.6	0	3	1
20	1085	69	26.2	133	3.1	61	8	21	23.5	0	2	1
21	1090	69	24.4	132	58.9	61	8	23	22.4	20	22	3
22	1092	69	26.3	132	58.5	61	8	24	19.0	0	3	1
23	1094	69	30.9	133	8.5	61	8	27	21.5	0	5	1
24	1095	69	27.5	133	0.0	61	8	27	22.4	5	9	2

BOTTLE /CTD DATA SET NUMBER:62-0001   YEAR: 1962

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO (M)	DEPTH (M)	
14	-	69	21.0	123	42.0	62	8	26	4.0	-	1	1
10	-	69	55.8	129	8.0	62	8	13	0.0	-	18	4
1	001	69	49.3	130	19.0	62	7	16	3.0	15	16	4
2	-	69	37.0	130	19.0	62	7	21	0.0	-	7	2
3	009	69	48.0	130	13.0	62	7	25	6.0	8	9	3
4	-	69	20.5	130	53.0	62	7	31	18.0	-	12	3
5	016	69	45.0	130	32.5	62	8	2	6.0	1	3	1
6	020	69	47.0	130	24.0	62	8	5	18.0	11	12	5
9	032	69	48.0	130	19.0	62	8	12	21.0	9	10	4
7	-	69	25.0	132	8.0	62	8	8	1.0	-	30	7
8	-	69	14.0	132	27.0	62	8	10	18.0	-	7	2
15	-	70	7.0	124	39.0	62	8	29	18.0	-	15	5
13	-	70	6.6	125	43.0	62	8	22	3.0	-	110	7
11	034	70	31.0	128	19.0	62	8	15	22.0	5	6	3
12	-	70	31.0	128	19.0	62	8	16	22.0	-	7	3

BOTTLE /CTD DATA SET NUMBER:62-0002   YEAR: 1962

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO (M)	DEPTH (M)	
1	-	69	26.5	132	59.1	62	4	27	19.0	-	12	11
2	-	69	25.0	132	58.2	62	4	27	21.0	-	18	13
3	-	69	24.9	132	58.4	62	4	27	22.0	-	22	20
4	-	69	25.4	132	58.4	62	4	28	0.0	-	6	6
5	-	69	25.5	132	58.6	62	4	28	1.0	-	13	14
6	-	69	25.0	132	58.2	62	4	28	15.0	-	18	37
7	-	69	25.0	132	58.2	62	4	28	17.0	-	18	26
8	-	69	25.0	132	58.1	62	4	28	17.0	-	15	26
9	-	69	25.0	132	58.2	62	4	28	18.0	-	18	27
10	-	69	25.0	132	58.1	62	4	28	18.0	-	15	26
11	-	69	24.3	132	59.5	62	4	28	21.0	-	15	24
12	-	69	23.8	132	59.4	62	4	28	21.0	-	10	5
13	-	69	24.9	132	58.2	62	4	28	22.0	-	18	23
14	-	69	24.7	132	58.6	62	4	28	22.0	-	26	9
15	-	69	24.7	132	58.6	62	4	28	22.0	-	26	24
16	-	69	24.9	132	58.1	62	4	29	1.0	-	5	5
19	-	69	26.9	132	59.8	62	4	29	16.0	-	9	12
20	-	69	26.5	132	59.1	62	4	29	17.0	-	12	14
21	-	69	25.9	132	59.8	62	4	29	17.0	-	9	12
22	-	69	25.9	132	59.8	62	4	29	17.0	-	9	12
23	-	69	26.3	132	58.6	62	4	29	18.0	-	5	5

CON	STN	LAT		LON		DATE				CAST TO (M)	WATER DEPTH (M)	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR			
24	-	69	25.5	132	58.6	62	4	29	18.0	-	13	17
25	-	69	25.3	132	58.4	62	4	29	19.0	-	6	6
26	-	69	24.9	132	58.2	62	4	29	22.0	-	18	20
27	-	69	24.3	132	59.5	62	4	29	23.0	-	15	15
28	-	69	24.9	132	58.1	62	4	29	23.0	-	5	8
29	-	69	24.7	132	58.6	62	4	30	0.0	-	22	19
30	-	69	26.9	132	59.8	62	4	30	15.0	-	9	15
31	-	69	26.9	132	59.8	62	4	30	16.0	-	9	9
32	-	69	26.9	132	59.8	62	4	30	16.0	-	9	12
34	-	69	26.9	132	59.8	62	4	30	17.0	-	9	10
37	-	69	26.9	132	59.8	62	4	30	19.0	-	9	9
42	-	69	26.9	132	59.8	62	4	30	22.0	-	9	11
44	-	69	26.9	132	59.8	62	4	30	23.0	-	9	11
47	-	69	26.9	132	59.8	62	5	1	0.0	-	9	11
49	-	69	26.9	132	59.8	62	5	1	2.0	-	9	9
52	-	69	26.9	132	59.8	62	5	1	5.0	-	9	10
55	-	69	24.9	132	58.1	62	5	1	17.0	-	5	9
56	-	69	24.7	132	58.6	62	5	1	17.0	-	22	17
57	-	69	23.3	132	59.1	62	5	1	19.0	-	7	11
58	-	69	23.8	132	59.4	62	5	1	19.0	-	10	17
59	-	69	24.7	132	58.6	62	5	1	21.0	-	22	27
60	-	69	23.3	132	59.1	62	5	1	22.0	-	7	11
61	-	69	26.5	132	59.1	62	5	1	23.0	-	12	10
62	-	69	26.5	132	59.1	62	5	2	0.0	-	12	10
63	-	69	23.3	132	59.1	62	5	2	0.0	-	7	12
64	-	69	23.3	132	59.1	62	5	2	0.0	-	7	12
65	-	69	24.9	132	58.1	62	5	2	1.0	-	5	9
66	-	69	26.9	132	59.8	62	5	2	15.0	-	9	15
67	-	69	26.9	132	59.8	62	5	2	16.0	-	9	13
69	-	69	26.9	132	59.8	62	5	2	18.0	-	9	13
70	-	69	24.9	132	58.1	62	5	2	19.0	-	5	9
71	-	69	26.9	132	59.8	62	5	2	19.0	-	9	12
72	-	69	26.9	132	59.8	62	5	2	21.0	-	9	14
75	-	69	26.9	132	59.8	62	5	2	22.0	-	9	15
76	-	69	26.9	132	59.8	62	5	2	23.0	-	9	8
77	-	69	26.9	132	59.8	62	5	3	0.0	-	9	15
78	-	69	24.9	132	58.1	62	5	3	1.0	-	5	10
79	-	69	26.9	132	59.8	62	5	3	1.0	-	9	14
80	-	69	23.8	132	58.4	62	5	3	3.0	-	26	14
83	-	69	26.9	132	59.8	62	5	3	19.0	-	9	14
84	-	69	26.9	132	59.8	62	5	3	21.0	-	9	13
85	-	69	26.9	132	59.7	62	5	3	22.0	-	7	13
86	-	69	26.9	132	59.5	62	5	3	22.0	-	6	8
87	-	69	26.9	132	59.5	62	5	3	23.0	-	6	8
88	-	69	26.9	132	59.5	62	5	4	0.0	-	6	11
89	-	69	26.9	132	59.7	62	5	4	0.0	-	9	15

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO (M)	DEPTH (M)	
91	-	69	24.9	132	58.1	62	5	4	3.0	-	5	11
92	-	69	23.8	132	59.3	62	5	4	4.0	-	10	15
93	-	69	24.7	132	58.6	62	5	4	4.0	-	22	24
94	-	69	25.5	132	58.6	62	5	4	5.0	-	13	19
95	-	69	26.9	132	59.8	62	5	4	5.0	-	9	15
96	-	69	24.9	132	58.1	62	5	4	18.0	-	5	9
97	-	69	24.7	132	58.6	62	5	4	19.0	-	22	27
98	-	69	23.8	132	59.3	62	5	4	19.0	-	10	16
99	-	69	26.9	132	59.8	62	5	4	20.0	-	9	15
100	-	69	26.9	132	59.8	62	5	4	23.0	-	9	14
101	-	69	26.9	132	59.8	62	5	4	23.0	-	9	14
102	-	69	26.9	132	59.8	62	5	5	0.0	-	9	14
103	-	69	26.9	132	59.8	62	5	5	0.0	-	9	12
104	-	69	26.9	132	59.8	62	5	5	0.0	-	9	15
105	-	69	26.9	132	59.8	62	5	5	1.0	-	9	14
106	-	69	26.9	132	59.8	62	5	5	1.0	-	9	17
107	-	69	24.9	132	58.1	62	5	5	2.0	-	5	9
108	-	69	24.9	132	58.1	62	5	5	16.0	-	5	8
17	-	69	26.6	133	2.2	62	4	29	15.0	-	17	15
18	-	69	26.6	133	2.2	62	4	29	15.0	-	17	9
33	-	69	26.6	133	2.2	62	4	30	17.0	-	17	13
35	-	69	26.6	133	2.2	62	4	30	18.0	-	17	9
36	-	69	26.8	133	2.0	62	4	30	19.0	-	3	3
38	-	69	26.8	133	2.0	62	4	30	19.0	-	3	1
39	-	69	26.6	133	2.2	62	4	30	20.0	-	17	1
40	-	69	26.6	133	2.2	62	4	30	21.0	-	17	11
41	-	69	26.8	133	2.0	62	4	30	21.0	-	3	3
43	-	69	26.6	133	2.2	62	4	30	22.0	-	17	13
45	-	69	26.6	133	2.2	62	5	1	0.0	-	17	11
46	-	69	26.8	133	2.0	62	5	1	0.0	-	3	4
48	-	69	26.8	133	2.0	62	5	1	2.0	-	3	3
50	-	69	26.8	133	2.0	62	5	1	3.0	-	3	3
51	-	69	26.6	133	2.2	62	5	1	4.0	-	17	13
53	-	69	26.8	133	2.0	62	5	1	5.0	-	3	3
54	-	69	26.6	133	2.2	62	5	1	5.0	-	17	13
68	-	69	27.8	133	2.4	62	5	2	17.0	-	5	6
73	-	69	27.8	133	2.4	62	5	2	21.0	-	5	8
74	-	69	27.8	133	2.4	62	5	2	22.0	-	5	7
81	-	69	30.8	133	14.5	62	5	3	15.0	-	6	9
82	-	69	40.6	133	20.1	62	5	3	17.0	-	8	15
90	-	69	26.9	133	2.0	62	5	4	0.0	-	9	17
109	-	69	21.0	134	11.0	62	5	6	2.0	-	18	18

BOTTLE /CTD DATA SET NUMBER:62-0003 YEAR: 1962

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO (M)	DEPTH (M)	
1	-	69	23.4	132	59.3	62	11	26	18.0	-	7	22
2	-	69	23.8	132	59.4	62	11	26	19.0	-	11	20
4	-	69	25.0	132	58.1	62	11	27	0.0	-	5	15
5	-	69	24.7	132	58.6	62	11	27	18.0	-	26	33
6	-	69	24.9	132	58.6	62	11	27	23.0	-	20	20
7	-	69	25.0	132	58.2	62	11	28	0.0	-	17	21
8	-	69	26.3	132	57.9	62	11	28	17.0	-	8	7
9	-	69	26.0	132	58.8	62	11	28	18.0	-	21	16
10	-	69	24.5	132	58.6	62	11	28	22.0	-	21	21
11	-	69	24.7	132	58.6	62	11	28	23.0	-	26	16
12	-	69	26.0	132	58.1	62	11	29	0.0	-	2	6
13	-	69	27.0	132	59.7	62	11	29	18.0	-	9	17
14	-	69	27.0	132	59.7	62	11	29	19.0	-	9	11
15	-	69	27.0	132	59.7	62	11	29	21.0	-	9	14
16	-	69	27.0	132	59.7	62	11	29	22.0	-	9	14
17	-	69	27.0	132	59.7	62	11	30	1.0	-	9	15
18	-	69	27.0	132	59.7	62	11	30	4.0	-	9	16
19	-	69	27.0	132	59.7	62	11	30	5.0	-	9	16
20	-	69	27.0	132	59.7	62	11	30	6.0	-	9	11
21	-	69	25.0	132	58.2	62	11	30	18.0	-	17	21
22	-	69	23.4	132	59.4	62	11	30	19.0	-	7	13
23	-	69	24.2	132	58.8	62	11	30	19.0	-	10	11
24	-	69	24.3	132	59.5	62	11	30	20.0	-	16	8
25	-	69	23.8	132	59.4	62	11	30	20.0	-	5	12
26	-	69	23.4	132	59.4	62	11	30	22.0	-	7	11
27	-	69	25.0	132	58.2	62	11	30	23.0	-	17	17
28	-	69	24.5	132	58.6	62	11	30	23.0	-	21	20
29	-	69	26.3	132	57.9	62	12	1	0.0	-	8	8
30	-	69	24.7	132	58.6	62	12	1	18.0	-	26	31
31	-	69	24.7	132	58.6	62	12	1	23.0	-	26	6
32	-	69	26.3	132	57.7	62	12	2	12.0	-	8	1
33	-	69	25.9	132	58.8	62	12	2	12.0	-	21	1
34	-	69	24.5	132	58.6	62	12	2	12.0	-	21	1
35	-	69	23.8	132	59.4	62	12	2	12.0	-	11	1
36	-	69	23.4	132	59.3	62	12	3	18.0	-	8	18
37	-	69	23.4	132	59.4	62	12	3	19.0	-	7	12
38	-	69	24.9	132	58.1	62	12	3	19.0	-	7	12
39	-	69	24.5	132	58.6	62	12	3	21.0	-	21	13
40	-	69	24.7	132	58.6	62	12	3	22.0	-	26	14
41	-	69	24.9	132	58.6	62	12	3	22.0	-	20	12
42	-	69	25.0	132	58.2	62	12	3	23.0	-	17	16
43	-	69	23.4	132	59.4	62	12	4	0.0	-	7	12
44	-	69	24.5	132	58.6	62	12	4	0.0	-	21	13
45	-	69	24.7	132	58.6	62	12	4	0.0	-	26	14
46	-	69	24.9	132	58.6	62	12	4	0.0	-	20	14

CON	STN	LAT		LON		DATE				CAST TO (M)	WATER DEPTH (M)	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR			
47	-	69	25.1	132	58.6	62	12	4	17.0	-	7	15
48	-	69	26.2	132	59.2	62	12	4	17.0	-	14	20
49	-	69	26.2	132	59.2	62	12	4	18.0	-	14	14
50	-	69	25.1	132	58.6	62	12	4	19.0	-	7	20
52	-	69	26.2	132	59.2	62	12	4	22.0	-	14	11
53	-	69	25.1	132	58.6	62	12	4	22.0	-	7	13
54	-	69	25.1	132	58.6	62	12	5	0.0	-	7	14
55	-	69	26.2	132	58.6	62	12	5	0.0	-	14	11
57	-	69	25.1	132	58.6	62	12	5	3.0	-	7	11
58	-	69	26.2	132	59.2	62	12	5	4.0	-	14	9
60	-	69	24.2	132	58.8	62	12	5	17.0	-	10	16
61	-	69	24.3	132	59.5	62	12	5	18.0	-	16	18
62	-	69	26.0	132	58.8	62	12	5	18.0	-	21	15
63	-	69	26.0	132	59.8	62	12	5	19.0	-	11	18
64	-	69	26.9	132	59.6	62	12	5	20.0	-	5	11
65	-	69	25.0	132	58.8	62	12	5	20.0	-	12	11
66	-	69	26.0	132	58.8	62	12	5	21.0	-	21	14
67	-	69	26.0	132	59.8	62	12	5	22.0	-	11	14
68	-	69	24.2	132	58.8	62	12	5	22.0	-	10	14
69	-	69	24.3	132	59.5	62	12	5	22.0	-	16	14
70	-	69	25.0	132	58.0	62	12	7	18.0	-	4	11
71	-	69	25.0	132	58.1	62	12	7	18.0	-	5	3
72	-	69	25.0	132	58.1	62	12	7	22.0	-	5	11
73	-	69	25.0	132	58.0	62	12	7	23.0	-	5	13
74	-	69	25.0	132	58.1	62	12	7	23.0	-	6	14
75	-	69	25.0	132	58.4	62	12	7	23.0	-	20	6
76	-	69	25.0	132	58.1	62	12	8	0.0	-	7	10
77	-	69	24.7	132	58.6	62	12	8	0.0	-	26	25
78	-	69	23.8	132	59.4	62	12	8	17.0	-	11	16
79	-	69	24.7	132	58.6	62	12	8	19.0	-	26	17
80	-	69	26.0	132	58.8	62	12	8	19.0	-	21	15
3	-	69	26.6	133	2.2	62	11	26	22.0	-	10	19
51	-	69	26.8	133	2.0	62	12	4	20.0	-	10	18
56	-	69	26.8	133	2.0	62	12	5	1.0	-	10	17
59	-	69	26.8	133	2.0	62	12	5	4.0	-	10	14
81	-	69	38.2	133	14.3	62	12	9	19.0	-	4	12

BOTTLE /CTD DATA SET NUMBER:62-0004 YEAR: 1962

CON	STN	LAT		LON		DATE				CAST TO (M)	WATER DEPTH (M)	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR			
1	-	69	25.0	132	58.1	62	12	14	20.0	-	5	3
2	-	69	25.0	132	58.4	62	12	14	21.0	-	20	6
3	-	69	25.0	132	58.1	62	12	24	21.0	-	5	2
4	-	69	25.0	132	58.4	62	12	24	22.0	-	20	6

BOTTLE /CTD DATA SET NUMBER:62-0004 YEAR: 1963

CON	STN	LAT		LON		DATE				CAST TO (M)	WATER DEPTH (M)	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR			
5	-	69	25.0	132	58.4	63	1	1	21.0	-	20	5
6	-	69	25.0	132	58.1	63	1	1	22.0	-	5	3
7	-	69	25.0	132	58.4	63	1	10	23.0	-	20	6
8	-	69	25.0	132	58.1	63	1	11	0.0	-	5	2
9	-	69	25.0	132	58.4	63	1	18	20.0	-	20	6
10	-	69	25.0	132	58.1	63	1	18	20.0	-	5	3
11	-	69	25.0	132	58.4	63	1	27	21.0	-	20	6
12	-	69	25.0	132	58.1	63	1	27	23.0	-	5	3
13	-	69	25.0	132	58.4	63	2	7	21.0	-	20	6
14	-	69	25.0	132	58.1	63	2	7	23.0	-	5	3
15	-	69	25.0	132	58.4	63	2	11	21.0	-	20	6
16	-	69	25.0	132	58.1	63	2	11	23.0	-	5	3
17	-	69	25.0	132	58.4	63	2	24	20.0	-	20	6
18	-	69	25.0	132	58.1	63	2	24	21.0	-	5	3
19	-	69	25.0	132	58.1	63	3	7	20.0	-	5	3
20	-	69	25.0	132	58.4	63	3	8	0.0	-	20	6
21	-	69	25.0	132	58.4	63	3	17	21.0	-	20	6
22	-	69	25.0	132	58.1	63	3	18	0.0	-	5	3
23	-	69	25.0	132	58.4	63	3	25	21.0	-	20	6
24	-	69	25.0	132	58.1	63	3	25	23.0	-	5	3
25	-	69	25.0	132	58.4	63	4	3	21.0	-	20	6
26	-	69	25.0	132	58.4	63	4	9	21.0	-	20	6
27	-	69	25.0	132	58.1	63	4	9	22.0	-	5	3
28	-	69	25.0	132	58.4	63	5	1	17.0	-	20	6
29	-	69	25.0	132	58.1	63	5	1	17.0	-	5	3

BOTTLE /CTD DATA SET NUMBER:63-0001 YEAR: 1963

CON	STN	LAT		LON		DATE				CAST TO (M)	WATER DEPTH (M)	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR			
11	-	69	39.9	123	33.5	63	8	13	4.0	-	59	8
12	-	69	27.0	124	17.0	63	8	14	1.0	-	31	6
3	-	69	22.9	125	40.5	63	7	30	3.0	-	13	6
4	-	69	22.9	125	40.5	63	7	31	23.0	-	19	5
5	-	69	39.3	125	22.3	63	8	1	21.0	-	15	4
13	-	69	52.0	125	54.0	63	8	20	23.0	-	78	9
8	-	70	17.9	123	55.0	63	8	6	3.0	-	180	11
9	-	70	11.4	124	16.7	63	8	8	3.0	-	64	8
14	-	70	14.3	124	34.4	63	8	28	19.0	-	70	9
1	-	70	6.2	125	9.0	63	7	24	21.0	-	36	6
7	-	70	3.9	125	28.5	63	8	4	20.0	-	81	10
2	-	70	3.7	126	0.0	63	7	26	1.0	-	182	11
6	-	70	5.8	126	2.5	63	8	3	12.0	-	185	11

BOTTLE /CTD DATA SET NUMBER:63-0002 YEAR: 1963

CON	STN	LAT		LON		DATE				CAST TO (M)	WATER DEPTH (M)	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR			
1	1	69	25.1	132	58.6	63	5	2	16.0	-	7	14
1	1	69	25.0	132	58.8	63	5	2	16.0	-	13	20
1	1	69	26.2	132	59.2	63	5	2	16.0	-	14	20
1	1	69	23.8	132	59.4	63	5	2	16.0	-	9	17
2	2	69	25.0	132	58.8	63	5	2	17.0	-	13	20
2	2	69	25.1	132	58.6	63	5	2	17.0	-	7	14
3	2	69	23.8	132	59.4	63	5	2	18.0	-	9	17
3	2	69	26.2	132	59.2	63	5	2	18.0	-	14	20
4	3	69	25.1	132	58.6	63	5	2	19.0	-	7	14
4	3	69	25.0	132	58.8	63	5	2	19.0	-	13	20
4	3	69	23.8	132	59.4	63	5	2	19.0	-	9	17
4	3	69	25.0	132	59.2	63	5	2	19.0	-	14	20
5	4	69	25.0	132	58.8	63	5	2	20.0	-	13	20
5	4	69	26.1	132	58.6	63	5	2	20.0	-	7	14
5	4	69	26.2	132	59.2	63	5	2	20.0	-	14	20
6	5	69	26.2	132	59.2	63	5	2	21.0	-	14	21
6	4	69	23.8	132	59.4	63	5	2	21.0	-	9	17
7	5	69	25.0	132	58.8	63	5	2	22.0	-	13	20
7	5	69	25.1	132	58.6	63	5	2	22.0	-	7	14
7	5	69	23.8	132	59.4	63	5	2	22.0	-	9	17
8	6	69	25.1	132	58.6	63	5	2	23.0	-	7	14
8	6	69	25.0	132	58.8	63	5	2	23.0	-	13	20
9	6	69	26.2	132	59.2	63	5	3	0.0	-	14	20

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO (M)	DEPTH (M)	
9	6	69	23.8	132	59.4	63	5	3	0.0	-	9	17
10	7	69	25.1	132	58.6	63	5	3	1.0	-	7	14
10	7	69	25.0	132	58.8	63	5	3	1.0	-	13	20
10	7	69	26.2	132	59.2	63	5	3	1.0	-	14	20
10	7	69	23.8	132	59.4	63	5	3	1.0	-	9	17
11	8	69	25.1	132	58.6	63	5	3	2.0	-	7	14
11	8	69	25.0	132	58.8	63	5	3	2.0	-	13	20
12	8	69	26.2	132	59.2	63	5	3	3.0	-	14	20
12	8	69	23.8	132	59.4	63	5	3	3.0	-	9	17
13	9	69	25.1	132	58.6	63	5	3	4.0	-	7	14
13	9	69	25.0	132	58.8	63	5	3	4.0	-	13	20
13	9	69	23.8	132	59.4	63	5	3	4.0	-	9	17
13	9	69	26.2	132	59.2	63	5	3	4.0	-	14	20
14	1	69	26.9	132	59.6	63	5	4	15.0	-	6	10
14	1	69	26.9	132	59.5	63	5	4	15.0	-	4	8
16	2	69	26.9	132	59.6	63	5	4	17.0	-	6	11
16	2	69	26.8	132	59.5	63	5	4	17.0	-	4	8
17	3	69	26.9	132	59.5	63	5	4	18.0	-	4	8
17	3	69	26.8	132	59.6	63	5	4	18.0	-	6	11
18	4	69	26.8	132	59.5	63	5	4	20.0	-	4	8
18	4	69	26.8	132	59.6	63	5	4	20.0	-	6	11
19	5	69	26.8	132	59.6	63	5	4	21.0	-	6	11
19	5	69	26.8	132	59.5	63	5	4	21.0	-	4	8
20	6	69	26.8	132	58.6	63	5	4	23.0	-	6	11
20	6	69	26.8	132	59.5	63	5	4	23.0	-	4	8
21	7	69	26.8	132	59.6	63	5	5	0.0	-	6	11
21	7	69	26.8	132	59.5	63	5	5	0.0	-	4	8
22	8	69	26.8	132	59.6	63	5	5	2.0	-	6	11
22	8	69	26.9	132	59.5	63	5	5	2.0	-	4	8
23	9	69	26.8	132	59.6	63	5	5	3.0	-	6	11
23	9	69	26.9	132	59.5	63	5	5	3.0	-	4	8
1	-	69	26.8	133	2.0	63	5	4	16.0	-	3	1
2	-	69	26.8	133	2.0	63	5	4	17.0	-	3	1
3	-	69	26.8	133	2.0	63	5	4	18.0	-	3	1
4	-	69	26.8	133	2.0	63	5	4	20.0	-	3	1
5	-	69	26.8	133	2.0	63	5	4	21.0	-	3	1
6	-	69	26.8	133	2.0	63	5	4	23.0	-	3	1
7	-	69	26.8	133	2.0	63	5	5	0.0	-	3	1
8	-	69	26.8	133	2.0	63	5	5	2.0	-	3	1
9	-	69	26.8	133	2.0	63	5	5	4.0	-	3	1

BOTTLE /CTD DATA SET NUMBER:63-0003   YEAR: 1963

CON	STN	LAT		LON		DATE				CAST TO (M)	WATER DEPTH (M)	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR			
1	1	69	23.4	132	59.5	63	7	26	20.0	-	10	5
2	2	69	23.8	132	59.5	63	7	26	21.0	-	10	5
3	3	69	24.1	132	58.9	63	7	26	22.0	-	13	7
4	4	69	24.3	132	59.5	63	7	26	23.0	-	13	7
5	5	69	24.5	132	58.7	63	7	27	0.0	-	25	8
6	6	69	24.7	132	58.6	63	7	27	1.0	-	27	7
7	7	69	24.9	132	58.5	63	7	27	2.0	-	21	7
8	8	69	25.0	132	58.2	63	7	27	2.0	-	17	7
9	9	69	26.6	132	2.2	63	7	27	16.0	-	11	6
10	-	69	26.5	132	59.3	63	7	27	17.0	-	13	7
11	-	69	26.4	132	57.9	63	7	27	17.0	-	5	3
12	-	69	26.0	132	58.7	63	7	27	17.0	-	9	5
13	-	69	26.0	132	59.8	63	7	27	18.0	-	10	6
14	-	69	25.5	132	58.7	63	7	27	20.0	-	22	8
15	-	69	25.0	132	58.1	63	7	28	2.0	-	16	7
16	-	69	25.0	132	58.1	63	7	28	2.0	-	5	3
17	-	69	27.0	132	59.6	63	7	29	0.0	-	4	3
23	-	69	24.7	132	58.6	63	8	15	23.0	-	27	8
29	-	69	27.0	132	59.6	63	9	14	1.0	-	4	3
31	-	69	26.5	132	59.3	63	9	14	21.0	-	14	7
32	-	69	26.4	132	57.9	63	9	15	15.0	-	5	3
33	-	69	26.0	132	58.7	63	9	15	15.0	-	9	5
34	-	69	26.0	132	59.8	63	9	15	16.0	-	10	6
35	-	69	25.6	132	58.8	63	9	15	16.0	-	22	8
36	-	69	24.9	132	58.5	63	9	15	17.0	-	20	7
37	-	69	25.0	132	58.2	63	9	15	18.0	-	17	7
38	-	69	24.7	132	58.6	63	9	15	18.0	-	27	8
39	-	69	24.5	132	58.7	63	9	15	21.0	-	25	8
40	-	69	24.3	132	59.5	63	9	15	22.0	-	13	7
41	-	69	24.1	132	58.9	63	9	15	22.0	-	13	7
42	-	69	23.8	132	59.5	63	9	15	23.0	-	10	5
43	-	69	23.4	132	59.4	63	9	15	23.0	-	10	5
44	-	69	25.0	132	58.1	63	9	16	15.0	-	12	7
45	-	69	25.0	132	58.1	63	9	16	16.0	-	5	3
18	-	69	27.1	133	.2	63	7	29	1.0	-	9	5
19	-	69	28.1	133	2.9	63	7	29	1.0	-	4	3
20	-	69	30.8	133	8.6	63	7	29	2.0	-	4	3
21	-	69	34.6	133	10.4	63	7	29	2.0	-	4	3
22	-	69	38.7	133	12.5	63	7	29	3.0	-	5	4
24	-	69	38.7	133	12.5	63	9	13	21.0	-	6	4
25	-	69	34.6	133	10.4	63	9	13	22.0	-	4	3
26	-	69	30.8	133	8.6	63	9	13	23.0	-	4	3
27	-	69	28.0	133	2.9	63	9	13	23.0	-	4	3
28	-	69	27.1	133	.2	63	9	14	0.0	-	9	4
30	-	69	26.6	133	2.2	63	9	14	20.0	-	11	6

BOTTLE /CTD DATA SET NUMBER:64-0001   YEAR: 1964

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO (M)	DEPTH (M)	
1	-	70	8.9	124	39.9	64	7	6	1.0	-	11	6
2	-	70	8.9	124	39.9	64	7	25	22.0	-	11	5
3	-	70	8.9	124	39.9	64	7	29	22.0	-	12	6
4	-	70	8.9	124	39.9	64	8	10	22.0	-	11	5
5	-	70	8.9	124	39.9	64	8	14	22.0	-	11	3

BOTTLE /CTD DATA SET NUMBER:64-0002   YEAR: 1964

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO (M)	DEPTH (M)	
17	-	70	9.0	132	16.0	64	8	19	99.9	18	20	7

BOTTLE /CTD DATA SET NUMBER:69-0001   YEAR: 1969

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO (M)	DEPTH (M)	
29	-	70	5.5	136	38.0	69	8	9	18.0	-	34	5
30	-	70	1.0	139	0.0	69	8	10	5.0	-	184	9
27	-	71	19.5	137	39.5	69	8	8	15.0	-	1784	10

BOTTLE /CTD DATA SET NUMBER:70-0001 YEAR: 1970

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO (M)	DEPTH (M)	
1	-	72	19.6	136	16.2	70	3	24	20.0	498	-	9
14	-	72	24.4	136	17.1	70	3	24	21.0	500	-	10
2	-	72	19.3	136	17.9	70	3	24	23.0	350	-	9
15	-	72	34.1	136	45.1	70	3	26	17.0	500	-	10
3	-	72	27.9	136	44.0	70	3	26	17.0	500	-	10
4	-	72	28.5	136	46.0	70	3	26	20.0	500	-	10
16	-	72	33.2	136	46.9	70	3	26	23.0	500	-	10
5	-	72	29.0	136	47.0	70	3	26	23.0	500	-	10
6	-	72	28.0	136	50.9	70	3	27	17.0	500	-	10
17	-	72	29.9	136	50.0	70	3	27	17.0	500	-	10
7	-	72	27.5	136	50.9	70	3	27	20.0	500	-	10
18	-	72	31.1	136	50.5	70	3	27	20.0	500	-	10
8	-	72	27.0	136	50.9	70	3	27	23.0	500	-	10
19	-	72	31.3	136	51.0	70	3	27	23.0	500	-	10
9	-	72	22.8	136	47.1	70	3	29	17.0	500	-	10
20	-	72	28.2	136	48.0	70	3	29	17.0	500	-	10
10	-	72	22.7	136	47.1	70	3	29	20.0	500	-	10
21	-	72	27.9	136	47.6	70	3	29	20.0	500	-	10
22	-	72	27.5	136	47.2	70	3	29	23.0	500	-	10
11	-	72	22.6	136	47.1	70	3	29	23.0	500	-	10
12	-	72	23.3	136	54.2	70	3	30	17.0	500	-	10
23	-	72	27.5	136	53.3	70	3	30	17.0	500	-	10
13	-	72	23.5	136	57.0	70	3	30	20.0	500	-	10
24	-	72	24.2	137	4.2	70	3	24	20.0	500	-	9

BOTTLE /CTD DATA SET NUMBER:70-0002 YEAR: 1970

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO (M)	DEPTH (M)	
268	-	69	56.5	134	33.0	70	9	18	15.0	-	15	4
269	-	69	51.0	135	20.0	70	9	19	8.0	-	17	4
254	-	69	59.3	140	15.7	70	8	31	2.0	-	54	4
255	-	69	42.0	140	38.0	70	8	31	4.0	-	26	3
273	-	71	20.0	119	24.0	70	9	24	15.0	-	137	7
274	-	71	59.0	119	30.0	70	9	24	19.0	-	118	7
272	-	70	49.8	123	30.5	70	9	24	5.0	-	523	11
262	-	70	38.7	129	39.4	70	9	12	22.0	-	21	5
267	-	70	50.0	129	52.0	70	9	14	22.0	-	32	4
271	-	71	2.0	125	44.0	70	9	23	18.0	-	410	10
270	-	71	15.8	127	57.6	70	9	23	13.0	-	106	5
266	-	70	56.8	130	3.6	70	9	14	21.0	-	38	6

CON	STN	LAT DEG	LAT MIN	LON DEG	LON MIN	DATE YR	DATE MO	DATE DY	DATE HR	CAST TO (M)	WATER DEPTH (M)	PTS
256	-	70	41.3	134	41.5	70	9	6	16.0	-	58	5
257	-	70	26.5	134	17.5	70	9	6	18.0	-	62	6
258	-	70	17.0	134	0.0	70	9	6	19.0	-	45	4
260	-	70	52.4	134	57.0	70	9	8	1.0	-	140	7
261	-	70	46.5	134	50.0	70	9	8	2.0	60	73	0
259	-	70	57.4	135	3.4	70	9	7	23.0	-	468	11
250	-	70	8.4	139	15.9	70	8	28	19.0	-	210	7
251	-	70	37.0	139	29.0	70	8	30	19.0	-	1426	14
252	-	70	22.0	139	42.0	70	8	30	23.0	-	509	11
253	-	70	10.3	139	52.6	70	8	31	0.0	-	62	5
263	-	71	26.8	130	53.9	70	9	14	15.0	-	313	9
264	-	71	16.6	130	37.6	70	9	14	17.0	-	62	7
265	-	71	7.0	130	17.3	70	9	14	19.0	-	44	6

BOTTLE /CTD DATA SET NUMBER:70-0003 YEAR: 1970

CON	STN	LAT DEG	LAT MIN	LON DEG	LON MIN	DATE YR	DATE MO	DATE DY	DATE HR	CAST TO (M)	WATER DEPTH (M)	PTS
12	-	69	42.2	132	55.4	70	7	19	18.0	5	-	4
13	-	69	44.4	132	41.5	70	7	19	18.0	6	-	4
14	-	69	45.2	132	37.4	70	7	19	19.0	6	-	5
15	-	69	48.6	132	34.9	70	7	19	20.0	9	-	6
16	-	69	51.7	132	35.9	70	7	19	20.0	14	-	6
17	-	69	52.7	132	54.7	70	7	19	21.0	12	-	7
1	-	69	30.5	133	5.3	70	7	15	21.0	-	-	2
2	-	69	30.6	133	10.9	70	7	15	22.0	4	-	2
3	-	69	30.8	133	16.2	70	7	15	22.0	4	-	2
4	-	69	32.2	133	16.5	70	7	15	23.0	3	-	2
5	-	69	33.5	133	11.1	70	7	16	0.0	3	-	2
6	-	69	34.6	133	2.9	70	7	16	0.0	4	-	2
7	-	69	36.0	133	8.5	70	7	16	1.0	3	-	2
8	-	69	37.5	133	14.6	70	7	16	1.0	4	-	2
9	-	69	38.6	133	7.1	70	7	16	2.0	4	-	2
10	-	69	39.5	133	40.0	70	7	17	23.0	5	-	4
11	-	69	44.2	133	3.2	70	7	19	17.0	6	-	5
18	-	69	51.5	133	10.1	70	7	19	22.0	-	-	8
19	-	69	47.7	133	5.2	70	7	19	23.0	10	-	6
20	-	69	45.0	133	3.6	70	7	20	0.0	9	-	4
21	-	69	42.2	133	3.6	70	7	20	0.0	7	-	4
22	-	69	34.8	133	11.5	70	7	22	15.0	6	-	5
23	-	69	31.9	133	7.2	70	7	23	15.0	3	-	4
24	-	69	33.5	133	3.0	70	7	23	17.0	5	-	5

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO (M)	DEPTH (M)	
25	-	69	47.3	133	44.5	70	7	24	17.0	7	-	4
26	-	69	41.5	133	37.5	70	7	24	18.0	9	-	6
27	-	69	44.7	133	34.5	70	7	24	18.0	-	-	8
28	-	69	52.2	133	35.7	70	7	24	19.0	-	-	6
29	-	69	43.0	134	2.0	70	7	24	20.0	-	-	4
30	-	69	47.4	134	4.0	70	7	24	21.0	15	-	5
31	-	69	51.2	134	6.4	70	7	24	22.0	10	-	5
32	-	69	54.6	134	8.4	70	7	24	22.0	7	-	6
33	-	69	58.5	134	10.6	70	7	24	23.0	4	-	7
34	-	69	51.7	134	22.7	70	7	25	0.0	3	-	8
35	-	69	49.6	134	20.1	70	7	27	16.0	-	-	7
36	-	69	49.3	134	31.5	70	7	27	19.0	-	-	8
37	-	69	51.4	134	42.0	70	7	27	23.0	5	-	6
38	-	69	48.4	134	40.9	70	7	28	0.0	9	-	6
39	-	69	48.4	134	40.9	70	8	23	20.0	-	-	7
40	-	69	47.4	134	4.7	70	8	25	15.0	-	-	5
41	-	69	50.0	134	9.9	70	8	25	16.0	-	-	7
42	-	69	51.3	134	12.8	70	8	25	17.0	-	-	7

BOTTLE /CTD DATA SET NUMBER:71-0001 YEAR: 1971

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO (M)	DEPTH (M)	
1	501	69	24.4	132	58.9	71	7	18	3.0	24	24	1
2	502	69	49.3	132	41.5	71	7	19	0.0	8	10	3
3	503	69	58.4	132	57.0	71	7	19	6.0	17	19	4
4	504	70	16.0	131	40.0	71	7	19	14.0	36	38	5
5	505	70	13.2	131	6.0	71	7	19	20.0	15	17	4
6	506	69	59.4	129	13.2	71	7	20	21.0	11	13	1

BOTTLE /CTD DATA SET NUMBER:71-0003 YEAR: 1971

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO (M)	DEPTH (M)	
142	-	73	59.3	131	25.6	71	3	18	14.0	500	-	9
143	-	73	59.2	131	27.0	71	3	18	19.0	500	-	9
145	-	73	59.2	131	29.4	71	3	19	5.0	500	-	9
148	-	73	57.0	131	31.5	71	3	20	0.0	500	-	9
149	-	73	57.6	131	30.3	71	3	20	5.0	500	-	9
150	-	73	57.4	131	29.1	71	3	20	14.0	500	-	9
151	-	73	58.1	131	28.1	71	3	20	19.0	500	-	9
152	-	73	57.9	131	27.1	71	3	21	0.0	500	-	9
153	-	73	55.9	131	28.2	71	3	21	5.0	500	-	9
154	-	73	55.9	131	24.8	71	3	21	14.0	500	-	9
155	-	73	55.4	131	23.5	71	3	21	19.0	500	-	9
156	-	73	53.7	131	23.3	71	3	22	0.0	500	-	9
157	-	73	52.6	131	23.5	71	3	22	5.0	500	-	9
16	-	73	59.6	131	18.5	71	3	22	5.0	500	-	10
158	-	73	51.0	131	25.1	71	3	22	14.0	500	-	9
17	-	73	58.0	131	20.1	71	3	22	14.0	500	-	10
159	-	73	50.4	131	25.8	71	3	22	19.0	500	-	9
18	-	73	57.4	131	20.8	71	3	22	19.0	500	-	10
160	-	73	49.4	131	28.0	71	3	23	0.0	500	-	9
19	-	73	56.4	131	23.0	71	3	23	0.0	500	-	10
161	-	73	46.8	131	31.6	71	3	23	5.0	500	-	9
20	-	73	53.8	131	26.6	71	3	23	5.0	500	-	10
162	-	73	46.0	131	31.9	71	3	23	14.0	500	-	13
21	-	73	53.0	131	26.9	71	3	23	14.0	500	-	10
33	-	73	44.9	131	32.0	71	3	23	19.0	500	-	9
22	-	73	51.9	131	27.0	71	3	23	19.0	500	-	10
34	-	73	45.7	131	30.0	71	3	24	0.0	500	-	10
23	-	73	52.7	131	25.0	71	3	24	0.0	500	-	10
24	-	73	50.4	131	26.8	71	3	24	5.0	500	-	10
35	-	73	43.4	131	31.8	71	3	24	5.0	500	-	10
36	-	73	43.4	131	28.0	71	3	24	14.0	500	-	10
25	-	73	50.4	131	23.0	71	3	24	14.0	500	-	10
26	-	73	49.7	131	20.1	71	3	24	19.0	500	-	10
37	-	73	42.7	131	25.1	71	3	24	19.0	500	-	10
27	-	73	48.7	131	16.3	71	3	25	0.0	500	-	10
38	-	73	41.7	131	21.3	71	3	25	0.0	500	-	10
39	-	73	41.3	131	20.7	71	3	25	5.0	500	-	10
28	-	73	48.3	131	15.7	71	3	25	5.0	500	-	10
40	-	73	41.2	131	20.8	71	3	25	14.0	500	-	10
29	-	73	48.2	131	15.8	71	3	25	14.0	500	-	10
41	-	73	41.7	131	20.3	71	3	25	19.0	500	-	10
30	-	73	48.7	131	15.3	71	3	25	19.0	500	-	10
42	-	73	42.2	131	19.7	71	3	26	0.0	500	-	10
31	-	73	49.2	131	14.7	71	3	26	0.0	500	-	10
43	-	73	41.7	131	20.5	71	3	26	5.0	500	-	10

CON	STN	LAT		LON		DATE				CAST TO (M)	WATER DEPTH (M)	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR			
32	-	73	48.7	131	15.5	71	3	26	5.0	500	-	12
44	-	73	41.3	131	20.9	71	3	26	14.0	500	-	10
114	-	73	48.3	131	15.9	71	3	26	14.0	500	-	9
115	-	73	49.0	131	15.2	71	3	26	19.0	500	-	10
45	-	73	42.0	131	20.2	71	3	26	19.0	500	-	10
116	-	73	48.2	131	15.9	71	3	27	0.0	500	-	10
46	-	73	41.2	131	20.9	71	3	27	0.0	500	-	10
117	-	73	47.5	131	16.6	71	3	27	5.0	500	-	10
47	-	73	40.5	131	21.6	71	3	27	5.0	500	-	10
48	-	73	41.0	131	21.0	71	3	27	14.0	500	-	10
118	-	73	48.0	131	16.0	71	3	27	14.0	500	-	10
49	-	73	40.6	131	21.6	71	3	27	19.0	500	-	10
119	-	73	47.6	131	16.6	71	3	27	19.0	500	-	10
50	-	73	40.6	131	21.6	71	3	27	20.0	500	-	10
120	-	73	47.6	131	16.6	71	3	27	20.0	500	-	10
121	-	73	47.3	131	17.0	71	3	27	21.0	500	-	10
122	-	73	43.7	131	17.0	71	3	27	22.0	500	-	10
123	-	73	47.3	131	17.0	71	3	27	23.0	500	-	10
124	-	73	47.3	131	17.0	71	3	28	0.0	500	-	10
51	-	73	40.3	131	22.0	71	3	28	0.0	500	-	10
52	-	73	41.0	131	21.0	71	3	28	5.0	500	-	10
125	-	73	48.0	131	16.0	71	3	28	5.0	500	-	10
126	-	73	47.4	131	16.1	71	3	28	14.0	500	-	10
53	-	73	40.4	131	21.1	71	3	28	14.0	500	-	10
127	-	73	47.2	131	15.4	71	3	28	19.0	500	-	10
54	-	73	40.2	131	20.4	71	3	28	19.0	500	-	10
128	-	73	46.6	131	15.2	71	3	29	0.0	500	-	10
55	-	73	39.6	131	20.2	71	3	29	0.0	500	-	10
129	-	73	46.2	131	15.3	71	3	29	5.0	500	-	10
56	-	73	39.2	131	20.3	71	3	29	5.0	500	-	10
130	-	73	46.8	131	14.8	71	3	29	14.0	500	-	10
57	-	73	39.8	131	19.8	71	3	29	14.0	500	-	10
131	-	73	48.8	131	14.2	71	3	29	19.0	500	-	10
58	-	73	41.8	131	19.2	71	3	29	19.0	500	-	10
59	-	73	39.2	131	20.3	71	3	30	0.0	500	-	10
132	-	73	46.2	131	15.3	71	3	30	0.0	500	-	10
133	-	73	46.5	131	14.7	71	3	30	5.0	500	-	10
60	-	73	39.5	131	19.7	71	3	30	5.0	500	-	10
134	-	73	46.1	131	15.8	71	3	30	14.0	500	-	9
61	-	73	39.1	131	20.8	71	3	30	14.0	500	-	10
62	-	73	39.4	131	20.1	71	3	30	19.0	500	-	10
135	-	73	46.4	131	15.1	71	3	30	19.0	500	-	10
136	-	73	46.6	131	14.9	71	3	31	0.0	500	-	10
63	-	73	39.6	131	19.9	71	3	31	0.0	500	-	10
137	-	73	46.0	131	15.5	71	3	31	5.0	260	-	8
64	-	73	39.0	131	20.5	71	3	31	5.0	500	-	10

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO (M)	DEPTH (M)	
138	-	73	46.2	131	15.6	71	3	31	14.0	500	-	10
65	-	73	39.2	131	20.6	71	3	31	14.0	500	-	10
139	-	73	45.7	131	16.2	71	3	31	19.0	500	-	10
66	-	73	38.7	131	21.2	71	3	31	19.0	500	-	10
140	-	73	45.6	131	16.2	71	4	1	0.0	500	-	10
67	-	73	38.6	131	21.2	71	4	1	0.0	500	-	10
141	-	73	44.8	131	16.2	71	4	1	5.0	500	-	10
68	-	73	37.8	131	21.2	71	4	1	5.0	500	-	10
86	-	73	59.4	132	20.8	71	3	22	19.0	500	-	10
87	-	73	58.4	132	23.0	71	3	23	0.0	500	-	10
88	-	73	55.8	132	26.6	71	3	23	5.0	500	-	10
89	-	73	55.0	132	26.9	71	3	23	14.0	500	-	10
90	-	73	53.9	132	27.0	71	3	23	19.0	500	-	10
91	-	73	54.7	132	25.0	71	3	24	0.0	500	-	10
92	-	73	52.4	132	26.8	71	3	24	5.0	500	-	10
93	-	73	52.4	132	23.0	71	3	24	14.0	500	-	10
94	-	73	51.7	132	20.1	71	3	24	19.0	500	-	10
95	-	73	50.7	132	16.3	71	3	25	0.0	500	-	10
96	-	73	50.3	132	15.7	71	3	25	5.0	500	-	10
97	-	73	50.2	132	15.8	71	3	25	14.0	500	-	10
98	-	73	50.7	132	15.3	71	3	25	19.0	500	-	10
99	-	73	51.2	132	14.7	71	3	26	0.0	500	-	10
100	-	73	50.7	132	15.5	71	3	26	5.0	500	-	10
101	-	73	50.3	132	15.9	71	3	26	14.0	500	-	10
102	-	73	51.0	132	15.2	71	3	26	19.0	500	-	10
103	-	73	50.2	132	15.9	71	3	27	0.0	500	-	10
104	-	73	49.5	132	16.6	71	3	27	5.0	500	-	10
105	-	73	50.0	132	16.0	71	3	27	14.0	500	-	10
106	-	73	49.6	132	16.6	71	3	27	19.0	500	-	10
107	-	73	49.3	132	17.0	71	3	28	0.0	500	-	10
108	-	73	50.0	132	16.0	71	3	28	5.0	500	-	10
109	-	73	49.4	132	16.1	71	3	28	14.0	500	-	10
110	-	73	49.2	132	15.4	71	3	28	19.0	500	-	10
111	-	73	48.6	132	15.2	71	3	29	0.0	500	-	10
112	-	73	48.2	132	15.3	71	3	29	5.0	500	-	10
113	-	73	48.8	132	14.8	71	3	29	14.0	500	-	10
163	-	73	48.2	132	15.3	71	3	30	0.0	500	-	10
164	-	73	48.5	132	14.7	71	3	30	5.0	500	-	10
165	-	73	48.1	132	15.8	71	3	30	14.0	500	-	10
166	-	73	48.4	132	15.1	71	3	30	19.0	500	-	10
167	-	73	48.6	132	14.9	71	3	31	0.0	500	-	10
168	-	73	48.0	132	15.5	71	3	31	5.0	500	-	10
169	-	73	48.2	132	15.6	71	3	31	14.0	500	-	10
170	-	73	47.7	132	16.2	71	3	31	19.0	500	-	10
171	-	73	47.7	132	16.2	71	3	31	20.0	100	-	20
172	-	73	47.6	132	16.2	71	4	1	0.0	500	-	10

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO (M)	DEPTH (M)	
173	-	73	46.8	132	16.2	71	4	1	5.0	500	-	10
1	-	74	6.3	131	20.6	71	3	18	14.0	500	-	10
2	-	74	6.2	131	22.0	71	3	18	19.0	500	-	10
144	-	74	.3	131	27.2	71	3	19	0.0	500	-	9
3	-	74	7.3	131	22.2	71	3	19	0.0	500	-	10
4	-	74	6.2	131	24.4	71	3	19	5.0	500	-	10
146	-	74	.2	131	28.9	71	3	19	14.0	500	-	9
5	-	74	7.2	131	23.9	71	3	19	14.0	500	-	10
147	-	74	.1	131	28.8	71	3	19	19.0	500	-	9
6	-	74	7.1	131	23.8	71	3	19	19.0	500	-	10
7	-	74	4.0	131	26.5	71	3	20	0.0	500	-	10
8	-	74	4.6	131	25.3	71	3	20	5.0	500	-	10
9	-	74	4.4	131	24.1	71	3	20	14.0	500	-	10
10	-	74	5.1	131	23.1	71	3	20	19.0	500	-	10
11	-	74	4.9	131	22.1	71	3	21	0.0	500	-	10
12	-	74	2.9	131	23.2	71	3	21	5.0	500	-	10
13	-	74	2.9	131	19.8	71	3	21	14.0	500	-	10
14	-	74	2.4	131	18.5	71	3	21	19.0	500	-	10
15	-	74	.7	131	18.3	71	3	22	0.0	500	-	10
69	-	74	8.3	132	20.6	71	3	18	14.0	500	-	10
70	-	74	8.2	132	22.0	71	3	18	19.0	500	-	10
71	-	74	9.3	132	22.2	71	3	19	0.0	500	-	10
72	-	74	8.2	132	24.4	71	3	19	5.0	500	-	10
73	-	74	9.2	132	23.9	71	3	19	14.0	500	-	10
74	-	74	9.1	132	23.8	71	3	19	19.0	500	-	10
75	-	74	6.0	132	26.5	71	3	20	0.0	500	-	10
76	-	74	6.6	132	25.3	71	3	20	5.0	500	-	10
77	-	74	6.4	132	24.1	71	3	20	14.0	500	-	10
78	-	74	7.1	132	23.1	71	3	20	19.0	500	-	10
79	-	74	6.9	132	22.1	71	3	21	0.0	500	-	10
80	-	74	4.9	132	23.2	71	3	21	5.0	500	-	10
81	-	74	4.9	132	19.8	71	3	21	14.0	500	-	10
82	-	74	4.4	132	18.5	71	3	21	19.0	220	-	7
83	-	74	2.7	132	18.3	71	3	22	0.0	500	-	10
84	-	74	1.6	132	18.5	71	3	22	5.0	500	-	10
85	-	74	0.0	132	20.1	71	3	22	14.0	500	-	10

BOTTLE /CTD DATA SET NUMBER:71-0004 YEAR: 1971

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO (M)	DEPTH (M)	
1	508	69	34.8	131	18.0	71	8	19	17.0	18	22	7
2	510	69	35.5	131	4.0	71	8	26	17.0	49	57	8
3	508	69	34.8	131	18.0	71	8	28	18.0	20	24	7
4	508	69	34.8	131	18.0	71	9	6	18.0	20	25	4
5	510	69	35.5	131	4.0	71	9	9	19.0	50	65	6
6	508	69	34.8	131	18.0	71	12	15	19.0	20	22	6

BOTTLE /CTD DATA SET NUMBER:72-0001 YEAR: 1972

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO (M)	DEPTH (M)	
21	-	69	48.5	138	26.4	72	4	2	22.0	-	186	7
22	-	69	36.4	138	12.9	72	4	3	0.0	-	142	6
11	-	69	45.3	140	29.5	72	3	31	17.0	-	30	3
12	-	69	59.9	140	10.4	72	3	31	19.0	-	75	4
1	-	70	44.7	129	53.8	72	3	21	20.0	-	26	3
2	-	70	57.7	130	4.1	72	3	21	22.0	-	30	3
28	-	70	25.1	133	28.6	72	4	5	22.0	-	40	4
9	-	70	44.8	134	50.8	72	3	27	22.0	-	68	4
10	-	70	40.9	134	44.8	72	3	27	23.0	-	49	4
27	-	70	26.0	134	20.8	72	4	5	21.0	-	52	4
7	-	70	58.3	135	12.3	72	3	27	17.0	-	300	8
8	-	70	50.9	135	.2	72	3	27	20.0	-	114	5
35	-	70	52.4	135	53.5	72	4	9	20.0	-	300	7
36	-	70	40.7	135	43.6	72	4	9	22.0	-	200	7
25	-	70	28.5	136	30.6	72	4	3	21.0	-	300	8
23	-	70	41.4	137	29.1	72	4	3	16.0	-	300	8
26	-	70	26.4	137	27.7	72	4	3	23.0	-	300	8
17	-	70	37.4	138	27.2	72	4	2	0.0	-	300	8
18	-	70	24.0	138	33.4	72	4	2	16.0	-	300	8
19	-	70	9.0	138	31.3	72	4	2	18.0	-	300	8
20	-	70	.1	138	29.7	72	4	2	20.0	-	270	8
13	-	70	11.9	139	59.0	72	3	31	21.0	-	150	4
14	-	70	22.7	139	46.3	72	4	1	16.0	-	300	8
15	-	70	37.3	139	20.6	72	4	1	19.0	-	300	8
3	-	71	.9	130	24.0	72	3	22	17.0	-	45	4
5	-	71	5.8	130	53.5	72	3	25	0.0	-	50	4
6	-	71	20.9	130	58.5	72	3	25	16.0	-	260	7
4	-	71	33.2	131	20.1	72	3	24	19.0	-	300	8
30	-	71	27.2	132	5.0	72	4	7	19.0	-	300	8
32	-	71	7.5	132	54.9	72	4	7	23.0	-	100	5

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO	DEPTH	
										(M)	(M)	
31	-	71	17.2	133	3.6	72	4	7	21.0	-	300	8
33	-	71	3.0	133	58.8	72	4	9	16.0	-	300	8
34	-	71	12.2	134	16.5	72	4	9	18.0	-	300	8
24	-	71	5.8	137	47.7	72	4	3	18.0	-	300	8
16	-	71	.4	138	23.1	72	4	1	21.0	-	300	8
29	-	71	19.7	139	59.0	72	4	7	17.0	-	230	7

BOTTLE /CTD DATA SET NUMBER:72-0004   YEAR: 1972

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO	DEPTH	
										(M)	(M)	
18	518	69	25.0	130	47.0	72	8	23	21.0	13	15	4
19	517	69	32.0	130	40.0	72	8	24	0.0	5	6	2
20	516	69	32.0	130	55.0	72	8	24	1.0	6	4	2
1	508	69	34.8	131	18.0	72	3	17	23.0	20	20	7
2	508	69	34.8	131	18.0	72	5	18	22.0	20	23	7
3	508	69	34.8	131	18.0	72	7	9	18.0	20	21	7
4	508	69	34.8	131	18.0	72	7	22	3.0	20	22	7
5	510	69	36.5	131	4.0	72	7	23	19.0	50	61	9
6	510	69	36.5	131	4.0	72	7	28	21.0	50	61	9
7	508	69	34.8	131	18.0	72	7	29	3.0	18	19	7
8	510	69	36.5	131	4.0	72	8	4	1.0	50	51	9
9	508	69	34.8	131	18.0	72	8	4	18.0	18	20	7
10	510	69	36.5	131	4.0	72	8	10	15.0	50	60	9
11	508	69	34.8	131	18.0	72	8	11	16.0	20	21	7
12	510	69	36.5	131	4.0	72	8	17	15.0	50	60	9
13	508	69	34.8	131	18.0	72	8	18	16.0	20	20	7
14	513	69	22.0	131	8.0	72	8	21	18.0	28	30	5
15	514	69	27.0	131	6.0	72	8	21	20.0	30	35	5
16	515A	69	33.0	131	12.0	72	8	21	22.0	25	27	5
21	508	69	34.8	131	18.0	72	8	25	13.0	20	22	7
22	-	69	33.0	131	27.0	72	8	25	18.0	-	33	5
23	520	69	30.0	131	39.0	72	8	25	20.0	40	43	5
24	521	69	26.0	131	53.0	72	8	25	22.0	6	8	3
29	510	69	36.5	131	4.0	72	8	28	15.0	50	58	9
30	508	69	34.8	131	18.0	72	8	29	14.0	20	22	7
31	515	69	32.0	131	11.0	72	8	29	16.0	39	41	5
32	508	69	34.8	131	18.0	72	9	4	19.0	15	16	3
33	508	69	34.8	131	18.0	72	11	25	21.0	17	18	7
25	522	69	20.0	132	5.0	72	8	26	1.0	20	23	4
26	523	69	17.0	132	14.0	72	8	26	2.0	8	9	3
27	524	69	14.0	132	21.0	72	8	26	13.0	5	6	2

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO (M)	DEPTH (M)	
28	525	69	9.0	132	29.0	72	8	26	16.0	8	9	4
17	519	69	27.0	130	55.0	72	8	23	18.0	40	45	7

BOTTLE /CTD DATA SET NUMBER:72-0007 YEAR: 1972

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO (M)	DEPTH (M)	
1	AI1	69	37.2	134	40.0	72	7	6	-	2	2	2
2	AI2	69	37.0	134	40.6	72	7	6	-	1	1	2
3	AI3	69	37.2	134	41.2	72	7	7	-	3	3	2
4	SS	69	37.5	134	41.0	72	7	7	-	3	3	2
5	5D	69	36.9	134	35.0	72	7	7	-	3	3	2
6	SS	69	37.5	134	41.0	72	7	8	-	3	3	2
7	AI	69	37.2	134	40.6	72	7	8	-	3	3	2
8	AI	69	37.2	134	40.6	72	7	8	-	3	3	2
9	7C	69	37.4	134	31.5	72	7	9	-	3	3	2
10	7D	69	39.0	134	.3	72	7	9	-	3	3	2
11	7E	69	41.2	134	28.0	72	7	9	-	3	3	2
12	5E	99	-	999	-	72	7	10	-	2	2	2
13	5B	69	33.9	134	39.5	72	7	10	-	2	2	2
14	5A	69	32.5	134	37.0	72	7	10	-	2	2	2
15	2A	69	32.0	134	36.0	72	7	10	-	2	2	2
16	1B	69	30.4	134	34.8	72	7	10	-	1	1	2
17	2B	69	31.7	134	37.9	72	7	10	-	1	1	2
18	7A	69	34.0	134	34.5	72	7	10	-	2	2	2
19	7B	69	35.7	134	33.2	72	7	10	-	3	3	2
20	3C	69	30.7	134	53.4	72	7	11	-	3	3	2
21	10B	69	32.1	134	26.9	72	7	19	-	1	1	2
22	6A	69	40.6	134	33.0	72	7	19	-	4	4	2
23	6B	69	40.0	134	38.9	72	7	19	-	4	4	2
24	6C	69	39.5	134	43.5	72	7	20	-	4	4	2
25	6D	69	39.0	134	48.5	72	7	20	-	4	4	2
26	6E	69	38.4	134	53.2	72	7	20	-	3	3	2
27	3A	69	33.1	135	2.3	72	8	2	-	1	1	2
28	3B	69	31.9	134	57.7	72	8	2	-	2	2	2
29	4C	69	32.8	134	51.9	72	8	2	-	2	2	2
30	4A	69	32.4	134	41.9	72	8	2	-	1	1	2
31	SS	69	37.5	134	41.0	72	8	3	-	3	3	2
32	AI	69	37.2	134	40.6	72	8	3	-	3	3	2
33	5D	69	36.9	134	35.0	72	8	4	-	2	2	2
34	6C	69	39.5	134	43.5	72	8	5	-	4	4	2
35	5A	69	32.5	134	37.0	72	8	9	-	1	1	2

CON	STN	LAT		LON		DATE				CAST TO (M)	WATER DEPTH (M)	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR			
36	10B	69	32.1	134	26.9	72	8	9	-	2	2	2
37	10E	69	31.6	134	12.1	72	8	9	-	2	2	2
38	9D	69	36.7	134	20.6	72	8	9	-	2	2	2
39	7E	69	41.2	134	28.0	72	8	10	-	4	4	2
40	7C	69	37.4	134	31.5	72	8	10	-	3	3	2
41	3B	69	31.9	134	57.7	72	8	16	-	2	2	2
42	10B	69	32.1	134	26.9	72	8	16	-	1	1	2
43	7E	69	41.2	134	28.0	72	8	16	-	2	2	2
44	7C	69	37.4	134	31.5	72	8	16	-	3	3	2
45	5A	69	32.5	134	37.0	72	8	17	-	1	1	2
46	9B	69	34.6	134	28.5	72	8	17	-	2	2	2
47	1B	69	30.4	134	34.8	72	8	17	-	1	1	2
48	6C	69	39.5	134	43.5	72	8	17	-	4	4	2
49	4C	69	32.8	134	51.9	72	8	18	-	2	2	2
50	8A	69	41.3	134	10.5	72	8	18	-	3	3	2
51	9D	69	36.7	134	20.6	72	8	18	-	1	1	2
52	AI	69	37.2	134	40.6	72	8	19	-	3	3	2
53	SS	69	37.5	134	41.0	72	8	19	-	3	3	2
54	5D	69	36.9	134	35.0	72	8	19	-	2	2	2
55	5A	69	32.5	134	37.0	72	9	10	-	1	1	2
56	7C	69	37.4	134	31.5	72	9	10	-	3	3	2
57	6C	69	39.5	134	43.5	72	9	10	-	4	4	2
58	AI	69	37.2	134	40.6	72	9	10	-	3	3	2
59	5D	69	36.9	134	35.0	72	9	10	-	2	2	2
60	3B	69	31.9	134	57.7	72	9	10	-	2	2	2
61	E1	69	28.0	134	36.6	72	9	13	-	-	-	1
62	E2	99	-	999	-	72	9	13	-	-	-	1
63	E3	69	28.5	134	23.5	72	9	14	-	-	-	1
64	E4	69	28.8	134	21.0	72	9	14	-	-	-	1
65	E5A	69	28.8	134	18.5	72	9	15	-	-	-	1
66	E6A	69	28.3	134	18.0	72	9	15	-	-	-	1
67	E6	69	27.6	134	8.2	72	9	16	-	-	-	1
68	E7	69	26.8	134	6.0	72	9	16	-	-	-	1
69	E8	69	27.4	134	4.9	72	9	17	-	-	-	1
70	E9	69	30.0	134	6.9	72	9	17	-	-	-	1
71	E11	69	35.8	134	7.3	72	9	19	-	-	-	1
72	E12	69	38.0	134	5.5	72	9	19	-	-	-	1

BOTTLE /CTD DATA SET NUMBER:73-0001 YEAR: 1973

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO (M)	DEPTH (M)	
73	AI1	69	37.2	134	40.0	73	3	20	-	-	3	20
74	AI2	69	37.0	134	40.6	73	3	21	-	-	3	2
75	AI3	69	37.2	134	41.2	73	3	21	-	-	3	2
76	SS	69	37.5	134	41.0	73	3	21	-	-	4	2
77	5D	69	36.9	134	35.0	73	3	21	-	-	3	2
78	6C	69	39.5	134	43.5	73	3	20	-	-	5	2
79	7B	69	35.7	134	33.2	73	3	21	-	-	3	2

BOTTLE /CTD DATA SET NUMBER:73-0002 YEAR: 1973

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO (M)	DEPTH (M)	
1	526	69	23.7	132	59.6	73	7	20	16.0	7	8	4
3	528	69	50.0	132	22.0	73	7	22	21.0	7	7	4
2	527	69	30.0	133	15.0	73	7	20	21.0	5	5	3
11	534	69	43.0	133	6.0	73	7	24	23.0	6	7	5
12	535	69	40.0	133	53.0	73	7	25	23.0	5	6	4
13	536	69	50.0	134	30.0	73	7	26	3.0	8	9	5
14	537	69	48.0	135	17.0	73	7	26	6.0	9	9	6
15	538	69	33.0	136	0.0	73	7	26	19.0	5	5	4
16	539	69	17.0	136	34.0	73	7	26	22.0	3	3	3
17	540	69	2.0	137	12.0	73	7	27	2.0	4	4	4
18	541	69	14.0	137	54.0	73	7	27	18.0	30	34	8
19	542	69	32.0	138	18.0	73	7	27	23.0	90	94	11
5	530	70	11.0	130	50.0	73	7	23	15.0	9	9	6
6	531	70	23.0	130	1.0	73	7	23	19.0	14	15	6
7	543A	70	31.0	130	7.0	73	7	23	23.0	15	0	5
8	543A	70	31.0	130	7.0	73	7	23	23.0	15	0	5
9	532	70	43.0	130	14.0	73	7	24	0.0	35	36	10
10	533	70	56.0	130	14.0	73	7	24	4.0	40	42	9
4	529	70	1.0	131	26.0	73	7	23	1.0	10	12	6

BOTTLE /CTD DATA SET NUMBER:73-0003   YEAR: 1973

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO (M)	DEPTH (M)	
1	508	69	34.8	131	18.0	73	2	24	1.0	20	23	7
2	515	69	32.0	131	11.0	73	5	20	19.0	40	47	9
3	508	69	34.8	131	18.0	73	5	20	23.0	20	22	7
4	508	69	34.8	131	18.0	73	6	21	17.0	20	24	7
5	508	69	34.8	131	18.0	73	6	28	15.0	20	24	7
6	515	69	32.0	131	11.0	73	6	28	22.0	40	41	9
23	508	69	34.8	131	18.0	73	7	19	17.0	20	26	7
24	515	69	32.0	131	11.0	73	7	19	22.0	40	42	9
31	515	69	32.0	131	11.0	73	7	27	18.0	40	43	9
32	508	69	34.8	131	18.0	73	7	27	23.0	20	25	7
39	508	69	34.8	131	18.0	73	8	3	16.0	20	24	7
40	515	69	32.0	131	11.0	73	8	3	21.0	40	41	9
47	515	69	32.0	131	11.0	73	8	13	14.0	40	44	9
48	508	69	34.8	131	18.0	73	8	13	16.0	20	25	7
49	515	69	32.0	131	11.0	73	8	16	18.0	40	44	9
52	515	69	32.0	131	11.0	73	8	23	15.0	40	44	9
53	508	69	34.8	131	18.0	73	8	23	21.0	20	24	7
65	515	69	32.0	131	11.0	73	9	30	18.0	46	47	9
66	508	69	34.8	131	18.0	73	10	1	17.0	20	23	7
14	508	69	34.8	131	18.0	73	7	7	20.2	20	23	7
13	515	69	32.0	131	11.0	73	7	5	17.9	40	41	9
21	515	69	32.0	131	11.0	73	7	11	19.5	40	43	9
22	508	69	34.8	131	18.0	73	8	12	16.8	20	22	7

BOTTLE /CTD DATA SET NUMBER:73-0003   YEAR: 1973

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO (M)	DEPTH (M)	
7	E1	69	31.0	131	24.0	73	7	4	17.6	60	62	12
15	E1	69	31.0	131	24.0	73	7	10	15.8	60	62	12
25	E1	69	31.0	131	24.0	73	7	24	15.7	50	56	11
33	E1	69	31.0	131	24.0	73	8	2	15.6	50	53	11
41	E1	69	31.0	131	24.0	73	8	12	17.1	50	58	11
54	E1	69	31.0	131	24.0	73	8	24	15.8	55	58	12
60	E1	69	31.0	131	24.0	73	8	29	18.5	50	54	11
8	E2	69	31.0	131	35.0	73	7	4	20.2	40	48	10
16	E2	69	31.0	131	35.0	73	7	10	18.1	50	56	11
26	E2	69	31.0	131	35.0	73	7	24	17.6	50	53	11
34	E2	69	31.0	131	35.0	73	8	2	19.4	60	62	12
42	E2	69	31.0	131	35.0	73	8	12	18.6	55	60	12
55	E2	69	31.0	131	35.0	73	8	24	17.5	55	59	12

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO	DEPTH	
										(M)	(M)	
9	E3	69	24.5	131	57.0	73	7	4	22.2	5	7	4
17	E3	69	24.5	131	57.0	73	7	10	20.4	7	9	5
27	E3	69	24.5	131	57.0	73	7	24	23.2	7	9	5
35	E3	69	24.5	131	57.0	73	8	2	19.5	7	8	5
43	E3	69	24.5	131	57.0	73	8	12	20.5	7	8	5
56	E3	69	24.5	131	57.0	73	8	24	22.8	7	9	5
61	E3	69	24.5	131	57.0	73	8	29	21.7	5	7	4
10	E4	69	21.0	132	5.0	73	7	4	23.8	12	14	7
18	E4	69	21.0	132	5.0	73	7	10	22.2	15	17	7
28	E4	69	21.0	132	5.0	73	7	24	21.8	15	17	7
36	E4	69	21.0	132	5.0	73	8	2	21.2	7	10	5
44	E4	69	21.0	132	5.0	73	8	12	22.1	10	12	6
57	E4	69	21.0	132	5.0	73	8	25	.2	15	18	7
62	E4	69	21.0	132	5.0	73	8	29	22.5	7	9	5
11	E5	69	17.5	132	12.0	73	7	5	11.1	15	18	7
19	E5	69	17.5	132	12.0	73	7	10	23.3	15	18	7
29	E5	69	17.5	132	12.0	73	7	24	23.0	15	18	7
37	E5	69	17.5	132	12.0	73	8	1	22.2	20	23	8
45	E5	69	17.5	132	12.0	73	8	12	23.0	15	19	7
58	E5	69	17.5	132	12.0	73	8	25	11.4	15	18	7
63	E5	69	17.5	132	12.0	73	8	29	23.3	20	25	8
12	E6	69	14.0	132	19.0	73	7	5	2.2	10	18	6
20	E6	69	14.0	132	19.0	73	7	10	.7	10	12	6
30	E6	69	14.0	132	19.0	73	7	25	.2	15	19	7
38	E6	69	14.0	132	19.0	73	8	3	0.0	15	17	7
46	E6	69	14.0	132	19.0	73	8	13	.1	15	20	7
59	E6	69	14.0	132	19.0	73	8	25	2.5	10	14	6
64	E6	69	14.0	132	19.0	73	8	30	.7	20	22	8
51	E7	69	13.5	132	31.0	73	8	18	1.2	3	4	3
50	E8	69	5.0	132	50.0	73	8	18	.7	3	3	3

BOTTLE /CTD DATA SET NUMBER:74-0001 YEAR: 1974

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO	DEPTH	
										(M)	(M)	
1	101	69	27.8	135	22.2	74	3	11	-	2	2	2
2	104	69	28.3	135	19.8	74	3	13	-	3	3	2
3	105	69	28.7	135	23.2	74	3	13	-	3	3	2
4	107	69	29.9	135	22.0	74	3	14	-	3	3	2
5	111	69	31.5	135	17.5	74	3	14	-	3	3	2
6	1130	69	31.5	135	16.9	74	3	15	-	2	2	2
7	1136	69	30.8	135	18.3	74	3	16	-	2	2	2

CON	STN	LAT		LON		DATE				CAST TO (M)	WATER DEPTH (M)	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR			
8	113J	69	31.4	135	16.0	74	3	17	-	3	3	2
9	113M	69	31.0	135	17.6	74	3	19	-	2	2	2
10	113P	69	30.8	135	16.6	74	3	19	-	2	2	2
11	113Q	69	30.5	135	16.2	74	3	19	-	2	2	2
12	113S	69	31.0	135	16.2	74	3	19	-	2	2	2
13	116	69	31.2	135	13.0	74	3	15	-	3	3	2
14	117	69	32.8	135	12.8	74	3	15	-	3	3	2
15	118	69	31.6	135	10.1	74	3	17	-	3	3	2
16	120	69	31.8	135	4.0	74	3	17	-	3	3	2
17	122	69	30.6	135	2.0	74	3	17	-	3	3	2
18	201	69	32.2	135	22.7	74	3	21	-	4	4	2
19	203	69	32.9	135	24.7	74	3	22	-	4	4	2
20	204	69	32.6	135	25.2	74	3	22	-	4	4	2
21	206	69	33.7	135	25.1	74	3	24	-	4	4	2
22	207	69	34.0	135	24.7	74	3	24	-	5	5	2
23	209	69	36.4	135	24.1	74	3	26	-	6	6	2
24	210	69	39.1	135	22.7	74	3	26	-	7	7	2
25	212	69	39.3	135	21.7	74	3	27	-	8	8	2
26	301	69	42.5	135	25.0	74	3	28	-	9	9	2
27	302	69	35.8	135	26.6	74	3	31	-	12	12	2
29	401	69	32.8	135	5.5	74	3	20	-	3	3	1
30	402	69	33.5	135	8.6	74	3	20	-	3	3	1
31	403	69	33.9	135	11.0	74	3	20	-	3	3	1
32	404	69	48.8	133	59.9	74	4	9	-	6	6	2
33	413	69	50.9	133	57.9	74	4	11	-	5	5	2
34	416	69	50.0	133	41.7	74	4	12	-	10	10	2
35	419	69	50.0	133	42.5	74	4	12	-	10	10	2
36	502	69	51.5	134	6.4	74	4	9	-	8	8	2
37	801	69	36.5	134	39.9	74	4	14	-	3	3	2
38	802	69	36.5	134	41.9	74	4	14	-	3	3	2
39	803	69	36.3	134	41.0	74	4	14	-	2	2	2
40	-	69	44.6	132	49.0	74	4	18	-	2	2	2

BOTTLE /CTD DATA SET NUMBER:74-0002 YEAR: 1974

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO (M)	DEPTH (M)	
1	S01	69	40.6	137	11.3	74	8	12	0.0	-	47	-
2	S02	70	7.2	134	37.1	74	8	13	0.0	-	33	-
3	S03	69	48.9	133	17.9	74	8	13	14.0	-	15	-
4	S04	69	52.8	133	43.3	74	8	13	22.0	-	15	-
5	S05	69	56.9	134	7.5	74	8	13	23.0	-	17	-
6	S06	70	7.7	134	20.0	74	8	14	3.0	-	35	-
7	S07	70	7.2	134	20.7	74	8	14	14.0	-	34	-
8	S08	70	8.2	134	15.0	74	8	15	2.0	-	35	-
9	S09	70	4.5	134	18.8	74	8	15	14.0	-	28	-
10	S10	69	40.4	137	8.8	74	8	15	23.0	-	17	-
11	S11	69	36.0	137	41.5	74	8	16	5.0	-	65	-
12	S11	69	36.0	137	41.5	74	8	16	6.0	-	65	-
13	S11	69	36.0	137	41.5	74	8	16	7.0	-	65	-
14	S11	69	36.0	137	41.5	74	8	16	8.0	-	65	-
15	S11	69	35.9	137	41.6	74	8	16	9.0	-	65	-
16	S11	69	35.9	137	41.6	74	8	16	10.0	-	65	-
17	S11	69	35.8	137	41.6	74	8	16	11.0	-	65	-
18	S11	69	35.7	137	41.5	74	8	16	12.0	-	65	-
18	S11	69	35.6	137	41.5	74	8	16	12.0	-	65	-
18	S11	69	35.6	137	41.5	74	8	16	12.0	-	65	-
19	S11	69	35.5	137	41.4	74	8	16	13.0	-	65	-
20	S11	69	35.5	137	41.4	74	8	16	14.0	-	65	-
21	S11	69	35.4	137	41.4	74	8	16	15.0	-	65	-
22	S11	69	35.3	137	41.4	74	8	16	16.0	-	65	-
23	S11	69	35.2	137	41.3	74	8	16	17.0	-	65	-
24	S11	69	35.2	137	41.3	74	8	16	18.0	-	65	-
25	S11	69	35.3	137	41.3	74	8	16	19.0	-	65	-
26	S11	69	35.5	137	41.4	74	8	16	20.0	-	65	-
27	S11	69	35.7	137	41.4	74	8	16	21.0	-	65	-
28	S11	69	35.9	137	41.6	74	8	16	22.0	-	65	-
29	S11	69	35.9	137	41.6	74	8	16	23.0	-	65	-
30	S11	69	35.9	137	41.6	74	8	17	0.0	-	65	-
31	S11	69	35.8	137	41.6	74	8	17	1.0	-	65	-
32	S11	69	35.8	137	41.6	74	8	17	2.0	-	65	-
33	S11	69	35.8	137	41.6	74	8	17	3.0	-	65	-
34	S11	69	35.8	137	41.6	74	8	17	4.0	-	65	-
35	S11	69	35.8	137	41.6	74	8	17	6.0	-	65	-
36	S11	69	35.8	137	41.6	74	8	17	7.0	-	65	-
37	S11	69	35.8	137	41.6	74	8	17	8.0	-	65	-
38	S11	69	35.9	137	41.5	74	8	17	9.0	-	65	-
38	S11	69	35.9	137	41.5	74	8	17	9.0	-	65	-
39	S11	69	36.1	137	41.5	74	8	17	10.0	-	65	-
39	S11	69	36.1	137	41.5	74	8	17	10.0	-	65	-
40	S11	69	36.1	137	41.5	74	8	17	11.0	-	65	-
41	S11	69	36.0	137	41.5	74	8	17	12.0	-	65	-

CON	STN	LAT		LON		DATE				CAST TO (M)	WATER DEPTH (M)	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR			
42	S11	69	35.9	137	41.5	74	8	17	13.0	–	65	–
43	S11	69	35.8	137	41.5	74	8	17	14.0	–	65	–
43	S11	69	35.8	137	41.5	74	8	17	14.0	–	65	–
44	S11	69	35.9	137	41.5	74	8	17	15.0	–	65	–
45	S11	69	36.0	137	41.5	74	8	17	16.0	–	65	–
46	S11	69	36.1	137	41.5	74	8	17	18.0	–	65	–
47	S11	69	36.1	137	41.5	74	8	17	19.0	–	65	–
48	S11	69	36.0	137	41.4	74	8	17	20.0	–	65	–
48	S11	69	35.9	137	41.3	74	8	17	20.0	–	65	–
49	S11	69	35.9	137	41.3	74	8	17	22.0	–	65	–
50	S11	69	35.9	137	41.3	74	8	17	23.0	–	65	–
51	S11	69	35.9	137	41.4	74	8	18	0.0	–	65	–
52	S11	69	35.9	137	41.5	74	8	18	1.0	–	65	–
53	S11	69	35.9	137	41.5	74	8	18	2.0	–	65	–
54	S11	69	35.9	137	41.5	74	8	18	3.0	–	65	–
55	S11	69	36.0	137	41.6	74	8	18	4.0	–	65	–
56	S11	69	36.0	137	41.6	74	8	18	5.0	–	65	–
57	S11	69	36.1	137	41.6	74	8	18	6.0	–	65	–
58	S11	69	36.1	137	41.6	74	8	18	7.0	–	65	–
59	S11	69	36.2	137	41.6	74	8	18	8.0	–	65	–
59	S11	69	36.3	137	41.5	74	8	18	8.0	–	65	–
60	S11	69	36.4	137	41.5	74	8	18	9.0	–	65	–
61	S11	69	36.5	137	41.5	74	8	18	10.0	–	65	–
62	S12	69	51.5	137	41.3	74	8	18	15.0	–	78	–
63	S13	69	49.0	138	23.2	74	8	18	19.0	–	–	149
63	S13	69	49.0	138	23.2	74	8	18	19.0	–	–	15
64	S13	69	48.9	138	23.2	74	8	18	20.0	–	191	–
65	S14	69	44.0	138	22.9	74	8	18	21.0	–	–	149
65	S14	69	44.0	138	22.9	74	8	18	21.0	–	–	20
66	S15	69	38.6	138	22.4	74	8	18	22.0	–	144	–
67	S16	69	33.0	138	23.7	74	8	18	23.0	–	–	75
67	S16	69	33.0	138	23.7	74	8	18	23.0	–	–	20
68	S17	69	26.3	138	9.9	74	8	19	1.0	–	66	–
69	S18	69	24.2	138	7.7	74	8	19	2.0	–	52	–
69	S19	69	18.8	138	5.7	74	8	19	2.0	–	42	–
70	S20	69	26.7	138	48.9	74	8	21	19.0	–	70	–
71	S21	69	36.4	138	34.2	74	8	22	15.0	–	–	7
71	S21	69	36.4	138	34.2	74	8	22	15.0	–	–	7
72	S22	69	35.5	138	41.9	74	8	22	16.0	–	46	–
73	S23	69	28.1	138	38.0	74	8	22	18.0	–	–	10
73	S23	69	28.1	138	38.0	74	8	22	18.0	–	–	10
74	S24	69	24.5	138	21.0	74	8	22	22.0	–	74	–
75	S25	69	28.9	138	.3	74	8	23	1.0	–	69	–
76	S26	69	28.9	137	43.5	74	8	23	3.0	–	50	–
77	S27	69	30.2	137	28.5	74	8	23	4.0	–	51	–
78	S28	69	29.8	137	10.5	74	8	23	14.0	–	39	–

CON	STN	LAT		LON		DATE				CAST TO (M)	WATER DEPTH (M)	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR			
79	S29	69	31.5	136	45.7	74	8	23	17.0	-	13	-
80	S36	69	18.2	137	10.9	74	8	23	22.0	-	13	-
81	S37	69	17.7	137	32.5	74	8	23	23.0	-	38	-
82	S38	69	18.0	137	53.9	74	8	24	1.0	-	39	-
83	S39	69	18.3	138	14.4	74	8	24	3.0	-	39	-
84	S40	69	22.0	138	20.0	74	8	24	15.0	-	27	-
85	S40	69	22.0	138	20.0	74	8	24	17.0	-	27	-
86	S40	69	22.0	138	20.0	74	8	24	19.0	-	27	-
87	S41	69	49.4	135	.1	74	8	25	14.0	-	11	-
88	S42	69	57.3	134	59.8	74	8	25	16.0	-	22	-
89	S43	70	.4	132	55.1	74	8	26	13.0	-	24	-
90	S44	69	58.2	132	1.6	74	8	26	16.0	-	17	-
91	S45	70	5.4	131	47.2	74	8	26	20.0	-	22	-
92	S46	70	12.0	131	41.9	74	8	26	21.0	-	26	-
93	S47	70	19.7	131	41.6	74	8	26	23.0	-	35	-
94	S47	70	20.0	131	41.9	74	8	27	0.0	-	35	-
95	S48	70	26.9	131	41.8	74	8	27	2.0	-	37	-
96	S49	70	30.8	131	43.4	74	8	27	3.0	-	41	-
97	S50	70	33.4	131	42.8	74	8	27	15.0	-	41	-
98	S51	70	23.2	131	42.8	74	8	27	17.0	-	-	30
98	S51	70	23.2	131	42.8	74	8	27	17.0	-	-	30
99	S52	69	56.6	133	27.1	74	8	28	2.0	-	21	-
100	S52	69	56.6	133	27.1	74	8	28	3.0	-	21	-
101	S53	70	4.4	135	1.4	74	8	28	23.0	-	24	-
102	S54	70	18.0	135	10.2	74	8	29	4.0	-	55	-
103	S54	70	18.0	135	10.2	74	8	29	5.0	-	55	-
104	S55	70	8.1	135	34.3	74	8	30	5.0	-	-	30
104	S55	70	8.1	135	34.3	74	8	30	5.0	-	-	10
105	S56	69	56.2	135	47.8	74	8	30	13.0	-	24	-
106	S56	69	56.2	135	47.9	74	8	30	14.0	-	24	-
107	S57	70	21.1	136	36.3	74	8	30	22.0	-	-	30
107	S57	70	21.1	136	36.3	74	8	30	22.0	-	-	50
108	S58	70	6.9	136	50.2	74	8	31	5.0	-	-	30
108	S58	70	6.9	136	50.2	74	8	31	5.0	-	-	7
109	S59	69	56.2	137	4.7	74	8	31	13.0	-	44	-
109	S60	70	5.4	139	8.2	74	9	1	3.0	-	-	174
110	S60	70	5.4	139	8.2	74	9	1	3.0	-	-	174
110	S60	70	5.5	139	8.0	74	9	1	4.0	-	-	174
111	S60	70	5.5	139	8.0	74	9	1	4.0	-	-	20
112	S61	69	47.4	138	55.7	74	9	1	15.0	-	97	-
113	S62	69	44.9	139	36.7	74	9	1	19.0	-	-	20
113	S62	69	44.7	139	35.6	74	9	1	19.0	-	-	20
114	S63	69	27.0	138	48.5	74	9	2	0.0	-	57	-
115	S64	69	36.3	138	21.0	74	9	2	15.0	-	128	-
116	S65	69	32.8	136	58.1	74	9	2	21.0	-	20	-
117	S66	69	59.7	135	21.0	74	9	3	2.0	-	31	-

BOTTLE /CTD DATA SET NUMBER:74-0003   YEAR: 1974

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO (M)	DEPTH (M)	
1	2	69	48.7	133	57.4	74	8	2	-	6	6	2
2	2	69	48.7	133	57.4	74	8	8	-	6	6	2
3	2	69	48.7	133	57.4	74	8	13	-	1	6	1
4	2	69	48.7	133	57.4	74	8	26	-	6	6	2
5	3	69	58.8	134	20.9	74	8	11	-	1	12	1
6	3	69	58.8	134	20.9	74	8	26	-	12	12	2
7	4	69	53.7	134	36.3	74	8	8	-	14	14	2
8	4	69	53.7	134	36.3	74	8	26	-	14	14	2
9	5	69	52.7	135	4.7	74	8	8	-	13	13	2
10	5	69	52.7	135	4.7	74	8	26	-	13	13	2
11	5	69	52.7	135	4.7	74	9	1	-	1	13	1
12	6	69	50.1	135	35.0	74	8	26	-	14	14	2
13	7	69	48.1	136	1.1	74	8	26	-	12	12	2
14	8	69	32.9	135	56.9	74	7	14	-	1	5	1
15	8	69	32.9	135	56.9	74	7	15	-	1	5	1
16	8	69	32.9	135	56.9	74	7	21	-	5	5	2
17	8	69	32.9	135	56.9	74	8	5	-	1	5	1
18	8	69	32.9	135	56.9	74	8	8	-	5	5	2
19	8	69	32.9	135	56.9	74	8	10	-	1	5	1
20	8	69	32.9	135	56.9	74	8	26	-	5	5	2
21	8	69	32.9	135	56.9	74	8	28	-	1	5	1
22	10	69	32.2	135	44.3	74	7	13	-	1	3	1
23	10	69	32.2	135	44.3	74	7	20	-	1	3	1
24	10	69	32.2	135	44.3	74	7	21	-	3	3	2
25	10	69	32.2	135	44.3	74	8	5	-	1	3	1
26	10	69	32.2	135	44.3	74	8	8	-	3	3	2
27	10	69	32.2	135	44.3	74	8	14	-	1	3	1
28	10	69	32.2	135	44.3	74	8	24	-	3	3	1
29	10	69	32.2	135	44.3	74	8	26	-	3	3	2
30	10	69	32.2	135	44.3	74	8	29	-	1	3	1
31	11	69	49.2	134	36.5	74	8	8	-	6	6	2
32	11	69	49.2	134	36.5	74	8	13	-	1	6	1
33	11	69	49.2	134	36.5	74	8	26	-	6	6	2
35	12	69	42.0	134	37.1	74	8	8	-	4	4	2
36	12	69	42.0	134	37.1	74	8	12	-	1	4	1
37	12	69	42.0	134	37.1	74	8	26	-	1	4	1
38	12	69	42.0	134	37.1	74	9	9	-	1	4	1
39	13	69	35.9	134	48.7	74	7	22	-	2	2	2
40	13	69	35.9	134	48.7	74	8	7	-	1	2	1
41	13	69	35.9	134	48.7	74	8	8	-	2	2	2
42	13	69	35.9	134	48.7	74	8	11	-	1	2	1
43	13	69	35.9	134	48.7	74	8	26	-	2	2	2
44	14	69	34.1	134	37.7	74	7	15	-	1	1	1
45	14	69	34.1	134	37.7	74	7	22	-	1	1	1
46	14	69	34.1	134	37.7	74	8	7	-	1	1	1

CON	STN	LAT		LON		DATE				CAST TO (M)	WATER DEPTH (M)	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR			
47	14	69	34.1	134	37.7	74	8	8	-	1	1	2
48	14	69	34.1	134	37.7	74	8	11	-	1	1	1
49	14	69	34.1	134	37.7	74	8	26	-	1	1	1
50	15	69	31.2	134	56.3	74	7	15	-	1	1	1
51	15	69	31.2	134	56.3	74	7	22	-	1	1	1
52	15	69	31.2	134	56.3	74	8	6	-	1	1	1
53	15	69	31.2	134	56.3	74	8	8	-	1	1	2
54	15	69	31.2	134	56.3	74	8	11	-	1	1	1
55	15	69	31.2	134	56.3	74	8	26	-	1	1	2
56	16	69	37.0	135	10.4	74	7	15	-	1	3	1
57	16	69	37.0	135	10.4	74	7	21	-	3	3	2
58	16	69	37.0	135	10.4	74	8	5	-	1	3	1
59	16	69	37.0	135	10.4	74	8	8	-	3	3	2
60	16	69	37.0	135	10.4	74	8	11	-	1	3	1
61	16	69	37.0	135	10.4	74	8	12	-	1	3	1
62	16	69	37.0	135	10.4	74	8	26	-	3	3	2
63	16	69	37.0	135	10.4	74	9	8	-	1	3	1
64	17	69	40.0	135	12.8	74	8	5	-	4	5	1
65	17	69	40.0	135	12.8	74	8	12	-	5	5	2
66	17	69	40.0	135	12.8	74	8	26	-	5	5	2
67	17	69	40.0	135	12.8	74	9	7	-	1	5	1
68	18	69	33.8	135	23.5	74	7	15	-	1	2	1
69	18	69	33.8	135	23.5	74	7	21	-	2	2	2
70	18	69	33.8	135	23.5	74	8	6	-	1	2	1
71	18	69	33.8	135	23.5	74	8	8	-	2	2	2
72	18	69	33.8	135	23.5	74	8	14	-	1	2	1
73	18	69	33.8	135	23.5	74	8	26	-	2	2	2
74	18	69	33.8	135	23.5	74	9	1	-	1	2	1
75	18	69	33.8	135	23.5	74	9	10	-	1	2	1
76	19	69	30.6	135	37.4	74	7	13	-	1	2	1
77	19	69	30.6	135	37.4	74	7	20	-	1	2	1
78	19	69	30.6	135	37.4	74	8	5	-	1	2	1
79	19	69	30.6	135	37.4	74	8	26	-	2	2	2
80	19	69	30.6	135	37.4	74	8	29	-	1	2	1
81	20	69	24.1	135	31.5	74	7	11	-	1	1	1
82	20	69	24.1	135	31.5	74	7	12	-	1	1	1
83	20	69	24.1	135	31.5	74	7	18	-	1	1	1
84	20	69	24.1	135	31.5	74	8	3	-	1	1	1
85	20	69	24.1	135	31.5	74	8	7	-	1	1	1
86	20	69	24.1	135	31.5	74	8	30	-	1	1	1
87	21	69	27.2	135	51.6	74	7	12	-	1	2	1
88	21	69	27.2	135	51.6	74	7	14	-	1	2	1
89	21	69	27.2	135	51.6	74	7	15	-	1	2	1
90	21	69	27.2	135	51.6	74	7	20	-	1	2	1
91	21	69	27.2	135	51.6	74	8	4	-	1	2	1
92	21	69	27.2	135	51.6	74	9	10	-	1	2	1

CON	STN	LAT		LON		DATE				CAST TO (M)	WATER DEPTH (M)	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR			
93	21	69	27.2	135	51.6	74	8	29	–	1	2	1
94	22	69	25.0	135	52.3	74	7	17	–	1	2	1
95	22	69	25.0	135	52.3	74	8	4	–	1	2	1
96	22	69	25.0	135	52.3	74	8	8	–	2	2	2
97	22	69	25.0	135	52.3	74	8	10	–	1	2	1
98	22	69	25.0	135	52.3	74	8	24	–	1	2	1
99	22	69	25.0	135	52.3	74	8	26	–	1	2	1
100	22	69	25.0	135	52.3	74	8	30	–	1	2	1
101	23	69	18.6	135	37.6	74	7	7	–	1	2	1
102	23	69	18.6	135	37.6	74	7	8	–	1	2	1
103	23	69	18.6	135	37.6	74	7	9	–	1	2	1
104	23	69	18.6	135	37.6	74	7	10	–	1	2	1
105	23	69	18.6	135	37.6	74	7	11	–	1	2	1
106	23	69	18.6	135	37.6	74	7	12	–	1	2	1
107	23	69	18.6	135	37.6	74	7	13	–	1	2	1
108	23	69	18.6	135	37.6	74	7	14	–	1	2	1
109	23	69	18.6	135	37.6	74	7	15	–	1	2	1
110	23	69	18.6	135	37.6	74	7	18	–	1	2	1
111	23	69	18.6	135	37.6	74	7	20	–	1	2	1
112	23	69	18.6	135	37.6	74	7	23	–	1	2	1
113	23	69	18.6	135	37.6	74	7	25	–	1	2	1
114	23	69	18.6	135	37.6	74	8	2	–	1	2	1
115	23	69	18.6	135	37.6	74	8	4	–	1	2	1
116	23	69	18.6	135	37.6	74	8	6	–	1	2	1
117	23	69	18.6	135	37.6	74	8	8	–	1	2	1
118	23	69	18.6	135	37.6	74	8	9	–	1	2	1
119	23	69	18.6	135	37.6	74	8	18	–	1	2	1
120	23	69	18.6	135	37.6	74	8	21	–	1	2	1
121	23	69	18.6	135	37.6	74	8	23	–	1	2	1
122	23	69	18.6	135	37.6	74	9	3	–	1	2	1
123	23	69	18.6	135	37.6	74	9	7	–	1	2	1
124	23	69	18.6	135	37.6	74	9	26	–	1	2	1
125	23	69	18.6	135	37.6	74	9	27	–	1	2	1
126	24	69	38.6	135	32.2	74	8	5	–	5	5	1
127	24	69	38.6	135	32.2	74	8	7	–	1	5	1
128	24	69	38.6	135	32.2	74	8	10	–	5	5	2
129	24	69	38.6	135	32.2	74	9	7	–	1	5	1
130	25	69	26.5	135	33.4	74	7	11	–	1	2	1
132	25	69	26.5	135	33.4	74	7	18	–	1	2	1
133	25	69	26.5	135	33.4	74	8	3	–	1	2	1
134	25	69	26.5	135	33.4	74	8	6	–	1	2	1
135	25	69	26.5	135	33.4	74	8	2	–	1	2	1
136	25	69	26.5	135	33.4	74	8	8	–	2	2	2
137	25	69	26.5	135	33.4	74	8	28	–	1	2	1
138	25	69	26.5	135	33.4	74	9	28	–	1	2	1
139	26	69	44.8	134	20.3	74	8	8	–	3	3	2

CON	STN	LAT		LON		DATE				CAST TO (M)	WATER DEPTH (M)	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR			
140	26	69	44.8	134	20.3	74	8	12	–	1	3	1
141	26	69	44.8	134	20.3	74	8	26	–	3	3	2
142	26	69	44.8	134	20.3	74	9	9	–	3	3	2
143	27	69	30.2	135	43.3	74	7	15	–	1	2	1
144	27	69	30.2	135	43.3	74	7	17	–	1	2	1
145	27	69	30.2	135	43.3	74	7	19	–	1	2	1
146	27	69	30.2	135	43.3	74	7	20	–	1	2	1
147	27	69	30.2	135	43.3	74	8	6	–	1	2	1
148	27	69	30.2	135	43.3	74	8	14	–	1	2	1
149	27	69	30.2	135	43.3	74	8	28	–	2	2	1
150	27	69	30.2	135	43.3	74	9	28	–	1	2	1
151	28	69	30.9	135	44.7	74	7	13	–	1	6	1
152	28	69	30.9	135	44.7	74	7	15	–	2	6	1
153	28	69	30.9	135	44.7	74	7	17	–	6	6	2
154	28	69	30.9	135	44.7	74	7	19	–	1	6	1
155	28	69	30.9	135	44.7	74	8	6	–	1	6	1
156	28	69	30.9	135	44.7	74	8	14	–	1	6	1
157	28	69	30.9	135	44.7	74	8	28	–	1	6	1
158	29	69	28.8	135	47.8	74	7	17	–	1	6	1
159	29	69	28.8	135	47.8	74	8	5	–	1	6	1
160	29	69	28.8	135	47.8	74	8	8	–	6	6	1
162	32	69	33.3	135	33.4	74	8	8	–	1	–	1
164	33	69	42.2	134	48.9	74	9	29	–	1	–	1
165	33	69	42.2	134	48.9	74	9	29	–	0	–	1
166	34	69	41.8	134	48.7	74	8	11	–	0	–	1
168	34	69	41.8	134	48.7	74	9	28	–	1	–	1
169	35	69	41.8	134	53.7	74	8	11	–	0	–	1
170	35	69	40.8	134	53.7	74	8	12	–	0	–	1
172	38	69	45.3	134	22.9	74	9	28	–	1	–	1
173	39	69	47.4	134	21.0	74	8	12	–	1	–	1
174	40	69	26.7	135	5.7	74	9	28	–	1	–	1
175	43	69	30.8	135	42.0	74	8	13	–	1	–	1
176	43	69	30.8	135	42.0	74	9	28	–	2	–	2
177	44	69	31.2	135	42.5	74	9	28	–	1	–	1
178	45	69	41.2	134	43.0	74	8	11	–	1	–	1
179	46	69	41.7	134	42.6	74	8	11	–	1	–	1
180	47	69	37.9	135	24.0	74	8	7	–	1	–	1
181	48	69	38.5	135	24.1	74	8	7	–	1	–	1
182	49	69	37.0	135	19.1	74	9	28	–	1	–	1
183	50	69	37.8	135	22.3	74	9	28	–	1	–	1
184	51	69	46.8	134	21.3	74	8	12	–	1	–	1
185	52	69	46.3	134	17.4	74	9	28	–	1	–	1
186	53	69	46.8	134	16.9	74	9	28	–	1	–	1
187	54	69	47.4	134	23.0	74	9	28	–	1	–	1
188	55	69	29.9	134	12.0	74	9	29	–	1	–	1
189	56	69	20.2	135	47.2	74	7	22	–	1	–	1

CON	STN	LAT DEG	LAT MIN	LON DEG	LON MIN	DATE YR	DATE MO	DATE DY	DATE HR	CAST TO (M)	WATER DEPTH (M)	PTS
190	56	69	20.2	135	47.2	74	7	26	-	1	-	1
191	56	69	20.2	135	47.2	74	8	8	-	1	-	2
192	60	69	36.6	135	18.8	74	9	29	-	1	-	1

BOTTLE /CTD DATA SET NUMBER:74-0007 YEAR: 1974

CON	STN	LAT DEG	LAT MIN	LON DEG	LON MIN	DATE YR	DATE MO	DATE DY	DATE HR	CAST TO (M)	WATER DEPTH (M)	PTS
2	9	71	22.0	130	24.0	74	7	25	20.8	110	111	10
3	12	71	2.0	133	56.0	74	7	29	19.0	260	267	12
1	14	70	9.0	133	24.0	74	7	14	17.5	32	34	8
6	22	69	46.0	138	52.0	74	8	12	19.3	75	79	10
7	23	70	1.0	138	56.0	74	8	16	19.0	220	226	11
4	29	70	17.0	136	26.0	74	8	2	19.7	50	52	9
5	30	69	55.0	136	12.0	74	8	2	23.5	24	25	7
8	544	70	33.4	131	42.8	74	8	27	15.3	35	41	6
9	545	70	23.2	131	42.0	74	8	27	17.8	35	37	6
10	546	69	56.6	133	27.1	74	8	28	3.1	18	21	5
11	547	70	18.0	134	10.2	74	8	29	5.1	50	55	7
12	548	70	8.1	135	34.3	74	8	30	5.5	40	44	9
13	549	69	56.2	135	47.8	74	8	30	13.3	20	20	7
14	550	70	21.2	136	36.3	74	8	30	22.4	55	58	8
15	551	70	6.1	136	50.2	74	8	31	5.5	35	40	7
16	552	69	56.2	137	4.7	74	8	31	14.6	40	43	8
17	553	70	5.4	139	8.2	74	9	1	3.6	200	202	13
18	554	69	47.4	138	55.7	74	9	1	15.7	90	97	10
19	555	69	44.9	139	36.7	74	9	1	19.3	26	30	6
20	556	69	27.0	138	48.5	74	9	2	.3	50	55	8
22	557	69	36.3	138	21.0	74	9	2	15.3	120	126	11
23	558	69	32.8	136	58.1	74	9	2	19.0	18	20	6
21	559	69	59.7	135	21.0	74	9	2	2.8	29	31	7

BOTTLE /CTD DATA SET NUMBER:74-0007 YEAR: 1974

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO (M)	DEPTH (M)	
1	562	69	35.0	133	5.0	74	12	1	0.0	2	5	2

BOTTLE /CTD DATA SET NUMBER:74-0008 YEAR: 1974

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO (M)	DEPTH (M)	
1	1	69	40.6	137	11.3	74	8	12	1.0	40	48	11
2	2	70	7.3	134	37.1	74	8	13	.7	25	30	9
3	7	70	7.2	134	20.7	74	8	14	15.1	25	30	9
4	11	69	36.0	137	41.0	74	8	17	19.0	55	64	13
5	11	69	36.0	137	41.0	74	8	17	.9	55	64	13
6	11	69	36.0	137	41.0	74	8	17	6.6	55	64	13
7	11	69	36.0	137	41.0	74	8	17	12.8	55	64	13
8	11	69	36.0	137	41.0	74	8	17	18.8	55	64	13
9	13	69	48.6	138	23.1	74	8	18	20.0	175	191	16
10	19	69	18.5	138	5.4	74	8	19	3.0	35	42	10
11	20	69	26.7	138	48.9	74	8	21	20.1	65	70	17
12	23	69	30.9	138	38.0	74	8	22	18.8	12	15	7
13	25	69	28.6	138	.2	74	8	23	2.7	60	65	13
14	28	69	29.5	137	10.3	74	8	23	15.2	30	43	10
15	36	69	18.1	137	10.6	74	8	23	22.4	10	9	6
16	38	69	18.0	137	53.5	74	8	24	2.2	30	35	10
17	41	69	49.2	135	.1	74	8	25	14.3	9	11	6
18	42	69	57.2	134	59.5	74	8	25	19.1	15	19	7
19	43	70	.3	134	55.0	74	8	26	6.2	25	24	9
20	44	69	58.2	132	1.6	74	8	26	17.2	15	13	7
21	46	70	12.0	131	41.8	74	8	26	22.3	20	22	8
22	48	70	26.5	131	41.5	74	8	27	2.4	30	33	10
23	51	70	24.5	131	40.9	74	8	27	19.2	35	35	16
24	54	70	9.1	134	51.4	74	8	29	5.7	50	51	13
25	55	70	6.7	135	29.3	74	8	30	6.0	35	42	11
26	56	69	56.2	135	47.8	74	8	30	16.4	20	20	8
27	57	70	31.5	137	35.7	74	8	30	23.6	55	57	13
28	60	70	5.5	139	8.0	74	9	1	5.2	200	205	15

BOTTLE /CTD DATA SET NUMBER:74-0010 YEAR: 1974

CON	STN	LAT		LON		DATE				CAST TO (M)	WATER DEPTH (M)	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR			
2	508	69	34.8	131	18.0	74	3	2	21.4	10	15	6
3	508	69	34.8	131	18.0	74	5	25	0.0	17	18	7
1	515	69	32.0	131	11.0	74	3	1	22.4	40	43	9
4	515	69	32.0	131	11.0	74	5	25	21.8	27	28	8

BOTTLE /CTD DATA SET NUMBER:74-10B YEAR: 1974

CON	STN	LAT		LON		DATE				CAST TO (M)	WATER DEPTH (M)	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR			
1	515	69	32.0	131	11.0	74	6	20	22.9	37	38	9

BOTTLE /CTD DATA SET NUMBER:74-0010 YEAR: 1974

CON	STN	LAT		LON		DATE				CAST TO (M)	WATER DEPTH (M)	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR			
1	515	69	32.0	131	11.0	74	6	20	22.9	37	38	9

BOTTLE /CTD DATA SET NUMBER:74-0010 YEAR: 1974

CON	STN	LAT		LON		DATE				CAST TO (M)	WATER DEPTH (M)	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR			
8	507	69	34.5	131	15.0	74	7	27	-	--	-	1
16	507	69	34.5	131	15.0	74	8	5	-	2	-	1
12	517	69	32.0	130	40.0	74	7	31	17.8	5	6	4
20	517	69	32.0	130	40.0	74	8	8	17.7	5	6	4
17	520	69	30.0	131	39.0	74	8	7	18.5	60	61	9
24	520	69	30.0	131	39.0	74	8	14	21.0	60	63	9
29	520	69	30.0	131	39.0	74	8	20	17.2	60	65	9
18	523	69	17.0	132	14.0	74	8	7	22.9	20	22	7
13	560	69	44.0	130	32.0	74	7	31	23.0	7	10	5
21	560	69	44.0	130	32.0	74	8	8	20.5	10	10	5
27	560	69	44.0	130	32.0	74	8	17	19.2	7	9	4
30	560	69	44.0	130	32.0	74	8	22	19.8	7	9	5

CON	STN	LAT		LON		DATE				CAST TO (M)	WATER DEPTH (M)	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR			
19	561	69	37.0	131	2.0	74	8	8	-	2	2	1
1	508	69	34.8	131	18.0	74	7	2	23.0	23	24	7
2	508	69	34.8	131	18.0	74	7	12	1.9	20	24	7
6	508	69	34.8	131	18.0	74	7	17	21.9	19	20	7
10	508	69	34.8	131	18.0	74	7	27	19.2	20	20	7
15	508	69	34.8	131	18.0	74	8	3	18.0	20	20	7
25	508	69	34.8	131	18.0	74	8	15	15.2	20	22	7
31	508	69	34.8	131	18.0	74	8	22	15.1	20	24	7
4	510	69	36.5	131	4.0	74	7	16	17.4	40	57	9
22	510	69	36.5	131	4.0	74	8	9	0.0	50	55	9
26	510	69	36.5	131	4.0	74	8	17	15.5	50	54	9
32	510	69	36.5	131	4.0	74	8	23	16.0	50	55	9
3	515	69	32.0	131	11.0	74	7	12	19.0	30	34	8
5	515	69	32.0	131	11.0	74	7	17	16.8	25	29	9
7	515	69	32.0	131	11.0	74	7	22	16.9	40	47	9
9	515	69	32.0	131	11.0	74	7	27	16.5	37	38	9
11	515	69	32.0	131	11.0	74	7	30	15.0	40	42	9
14	515	69	32.0	131	11.0	74	8	3	14.0	40	43	9
23	515	69	32.0	131	11.0	74	8	9	15.5	40	46	9
28	515	69	32.0	131	11.0	74	8	19	16.4	38	40	9

BOTTLE /CTD DATA SET NUMBER:74-0011 YEAR: 1974

CON	STN	LAT		LON		DATE				CAST TO (M)	WATER DEPTH (M)	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR			
3	A	69	33.4	139	33.0	74	7	20	-	0	-	1
2	A	69	33.4	139	33.0	74	7	12	-	0	-	1
5	A	69	33.4	139	33.0	74	8	1	-	0	-	1
7	A	69	33.4	139	33.0	74	8	8	-	0	-	1
9	A	69	33.4	139	33.0	74	8	18	-	0	-	1
12	A	69	33.4	139	33.0	74	9	8	-	0	-	1
14	A	69	33.4	139	33.0	74	9	21	-	0	-	1
2	B	69	33.5	139	33.0	74	7	12	-	0	-	1
6	B	69	33.5	139	33.0	74	8	6	-	0	-	1
7	B	69	33.5	139	33.0	74	8	8	-	0	-	1
9	B	69	33.5	139	33.0	74	8	18	-	0	-	1
12	B	69	33.5	139	33.0	74	9	8	-	0	-	1
14	B	69	33.5	139	33.0	74	9	21	-	0	-	1
10	C	69	36.0	139	33.0	74	8	25	-	12	-	11
1	A	69	33.4	139	33.0	74	7	8	-	0	-	1
8	A	69	33.4	139	33.0	74	8	13	-	0	-	1
11	A	69	33.4	139	33.0	74	8	26	-	0	-	1

CON	STN	LAT DEG MIN	LON DEG MIN	DATE YR	 MO	 DY	 HR	CAST TO (M)	WATER DEPTH (M)	PTS
10	C	69 36.0	139 33.0	74	8	25	-	5	-	3
1	B	69 33.5	139 33.0	74	7	8	-	1	-	2
4	B	69 33.5	139 33.0	74	7	29	-	0	-	1
8	B	69 33.5	139 33.0	74	7	29	-	0	-	1
11	B	69 33.5	139 33.0	74	8	26	-	0	-	1
13	B	69 33.5	139 33.0	74	9	9	-	0	-	1

BOTTLE /CTD DATA SET NUMBER:74-0019 YEAR: 1974

CON	STN	LAT DEG	LAT MIN	LON DEG	LON MIN	DATE YR	DATE MO	DATE DY	DATE HR	CAST TO (M)	WATER DEPTH (M)	PTS
0	U11	69	35.0	134	39.0	74	2	0	0.0	0	0	2
0	U12	69	35.8	134	40.0	74	2	0	0.0	0	0	2
0	U13	69	36.5	134	41.0	74	2	0	0.0	1	1	2
0	U14	69	37.3	134	42.0	74	2	0	0.0	1	1	2
0	U15	69	38.2	134	43.0	74	2	0	0.0	1	1	2
0	U16	69	39.0	134	44.0	74	2	0	0.0	1	1	2
0	U17	69	39.8	134	45.0	74	2	0	0.0	1	1	2
0	U19	69	32.7	134	42.0	74	2	0	0.0	1	1	2
0	U20	69	32.2	134	44.0	74	2	0	0.0	0	0	2
0	U21	69	31.5	134	44.5	74	2	0	0.0	0	0	2
0	P01	69	34.5	135	23.5	74	2	0	0.0	1	1	2
0	P02	69	34.3	135	23.5	74	2	0	0.0	1	1	2
0	P03	69	34.2	135	23.5	74	2	0	0.0	1	1	2
0	P04	69	34.1	135	23.5	74	2	0	0.0	1	1	2
0	P05	69	34.1	135	23.5	74	2	0	0.0	1	1	2
0	P06	69	34.0	135	23.5	74	2	0	0.0	1	1	2
0	P07	69	34.0	135	23.5	74	2	0	0.0	0	0	2
0	P08	69	33.8	135	23.5	74	2	0	0.0	1	1	2
0	P09	69	33.7	135	23.5	74	2	0	0.0	1	1	2
0	P10	69	34.1	135	25.0	74	2	0	0.0	1	1	2
0	P11	69	34.1	135	24.5	74	2	0	0.0	1	1	2
0	P12	69	34.1	135	24.0	74	2	0	0.0	1	1	2
0	P13	69	34.1	135	23.5	74	2	0	0.0	1	1	2
0	P14	69	34.1	135	23.5	74	2	0	0.0	1	1	2
0	P15	69	34.1	135	23.5	74	2	0	0.0	1	1	2
0	P16	69	34.1	135	23.0	74	2	0	0.0	1	1	2
0	P17	69	34.1	135	22.5	74	2	0	0.0	1	1	2
0	101	69	33.3	135	22.5	74	3	0	0.0	1	1	2
0	103	69	33.3	135	24.2	74	3	0	0.0	1	1	2
0	105	69	33.3	135	25.9	74	3	0	0.0	1	1	2
0	107	69	33.2	135	27.5	74	3	0	0.0	1	1	2
0	109	69	33.2	135	29.2	74	3	0	0.0	1	1	2
0	111	69	33.2	135	31.0	74	3	0	0.0	0	0	2
0	113	69	32.3	135	30.0	74	3	0	0.0	1	1	2
0	115	69	32.6	135	28.8	74	3	0	0.0	1	1	2
0	117	69	33.0	135	27.5	74	3	0	0.0	1	1	2
0	119	69	33.5	135	26.0	74	3	0	0.0	1	1	2
0	313	69	38.1	135	23.5	74	3	0	0.0	1	1	2
0	314	69	38.5	135	23.2	74	3	0	0.0	4	4	2
0	315	69	38.8	135	23.0	74	3	0	0.0	3	4	2
0	317	69	38.6	135	24.5	74	3	0	0.0	2	2	2
0	309	69	36.4	135	24.0	74	3	0	0.0	3	3	2
0	404	69	36.1	135	17.9	74	3	0	0.0	0	0	2
0	406	69	36.2	135	16.5	74	3	0	0.0	0	0	2
0	408	69	36.8	135	14.6	74	3	0	0.0	2	2	2

CON	STN	LAT DEG	LAT MIN	LON DEG	LON MIN	DATE YR	DATE MO	DATE DY	DATE HR	CAST TO (M)	WATER DEPTH (M)	PTS
0	410	69	37.2	135	13.3	74	3	0	0.0	2	2	2
0	412	69	37.1	135	15.2	74	3	0	0.0	2	2	2
0	414	69	37.5	135	16.5	74	3	0	0.0	1	1	2
0	416	69	35.7	135	18.5	74	3	0	0.0	1	1	2
0	418	69	35.0	135	20.6	74	3	0	0.0	0	0	2

BOTTLE /CTD DATA SET NUMBER:74-0021 YEAR: 1974

CON	STN	LAT DEG	LAT MIN	LON DEG	LON MIN	DATE YR	DATE MO	DATE DY	DATE HR	CAST TO (M)	WATER DEPTH (M)	PTS
1	V	69	2.0	137	26.0	74	4	0	0.0	4	4	2
1	I	69	7.0	137	37.0	74	4	0	0.0	6	6	2
1	VI	69	7.5	137	59.0	74	4	0	0.0	15	18	2
1	II	69	23.0	138	43.0	74	4	0	0.0	11	11	2
1	III	69	31.5	138	56.0	74	4	0	0.0	15	50	2
12	31	69	34.0	138	55.0	74	8	24	0.0	0	0	1
14	45	69	29.0	138	52.0	74	9	4	0.0	0	0	1
11	41	69	18.0	138	25.0	74	8	16	0.0	0	0	1
7	114	69	6.5	137	58.0	74	7	30	0.0	0	0	1
2	2	69	12.0	138	27.0	74	7	7	0.0	0	0	1
5	1	69	15.0	138	31.0	74	7	17	0.0	0	0	1
8	30	69	20.5	138	56.0	74	7	31	0.0	0	0	1
10	112	69	4.5	137	46.0	74	8	15	0.0	0	0	1
9	104	69	0.0	137	19.0	74	8	8	0.0	0	0	1
4	6	69	6.5	137	37.0	74	7	16	0.0	0	0	1
6	8	69	7.0	137	41.0	74	7	18	0.0	0	0	1
13	36	69	26.0	139	3.0	74	9	2	0.0	0	0	1
3	9	69	12.5	137	22.0	74	7	15	0.0	0	0	1

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BOTTLE /CTD DATA SET NUMBER:74-0022      YEAR: 1974

 CON  STN    LAT       LON           DATE           CAST WATER  PTS
           DEG MIN  DEG MIN     YR MO DY HR          TO  DEPTH
                                                    (M)   (M)

   1    2  68 47.0 136 32.0     74 10  1  0.0        0     3     1
   8    2  68 47.0 136 32.0     74 11  9  0.0        0     3     1
   1    7  68 49.0 136  6.0     74 10  1  0.0        0     4     1
   7    8  68 49.0 136  3.0     74 11  8  0.0        0     3     1
   6   14  68 57.0 135 30.0     74 11  7  0.0        0     9     1
   3   16  68 58.0 135 22.0     74 11  4  0.0        0     2     1
   5   18  69   .5 135  9.0     74 11  6  0.0        0     2     1
   2   21  69  2.0 135  0.0     74 10  4  0.0        0     4     1
   5   22  69  2.0 134 58.0     74 11  6  0.0        0     3     1
   4   30  68 57.0 134 48.0     74 11  5  0.0        0     2     1
   9   27  69  5.0 134 46.0     74 11 11  0.0        0     0     1
   2   28  69  1.0 134 40.0     74 10  4  0.0        0     3     1
   9   28  69  1.0 134 40.0     74 11 11  0.0        0     3     1

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BOTTLE /CTD DATA SET NUMBER:74-0022   YEAR: 1975

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO (M)	DEPTH (M)	
13	1	68	47.0	136	42.0	75	4	5	0.0	0	2	1
13	2	68	47.0	136	32.0	75	4	5	0.0	0	2	1
13	4	68	49.0	136	11.0	75	4	5	0.0	0	0	1
13	7	68	49.0	136	6.0	75	4	5	0.0	0	1	1
13	8	69	49.0	136	3.0	75	4	5	0.0	0	2	1
13	9	68	51.0	135	58.0	75	4	5	0.0	0	0	1
13	10	68	52.0	135	55.0	75	4	5	0.0	0	0	1
12	14	68	57.0	135	30.0	75	4	4	0.0	0	3	1
12	15	68	58.5	135	23.0	75	4	4	0.0	0	1	1
12	17	68	58.0	135	19.0	75	4	4	0.0	0	2	1
12	18	69	.5	135	9.0	75	4	4	0.0	0	0	1
11	19	69	2.0	135	10.0	75	4	3	0.0	0	2	1
10	20	69	3.0	135	5.0	75	4	2	0.0	0	7	1
13	24	69	4.5	134	54.0	75	4	5	0.0	0	4	1
13	30	68	57.0	134	48.0	75	4	5	0.0	0	0	1
10	25	69	6.0	134	54.0	75	4	2	0.0	0	1	1
10	26	69	4.0	134	47.0	75	4	2	0.0	0	2	1
10	29	69	5.5	134	26.0	75	4	2	0.0	0	10	1

BOTTLE /CTD DATA SET NUMBER:75-0001   YEAR: 1975

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO (M)	DEPTH (M)	
1	S01	73	43.0	124	56.0	75	3	16	21.5	28	28	6
2	S02	73	43.0	124	56.0	75	3	17	19.5	25	28	6
4	S03	73	43.0	125	49.0	75	3	17	21.5	68	68	11
3	S04	73	43.0	126	35.0	75	3	17	20.8	90	110	10
5	S05	73	43.0	127	29.0	75	3	17	21.9	90	110	10
7	SOA	71	39.0	126	11.0	75	3	20	4.5	90	220	16
8	SOA	71	39.0	126	11.0	75	3	20	5.6	74	220	13
9	SOA	71	39.0	126	11.0	75	3	20	6.7	86	220	13
10	SOA	71	39.0	126	11.0	75	3	20	7.6	86	220	14
11	SOA	71	39.0	126	11.0	75	3	20	8.5	83	220	14
12	SOA	71	39.0	126	11.0	75	3	20	9.5	85	220	14
13	SOA	71	39.0	126	11.0	75	3	20	10.6	90	220	14
14	SOA	71	39.0	126	11.0	75	3	20	11.5	90	220	14
15	SOA	71	39.0	126	11.0	75	3	20	12.5	90	220	14
16	SOA	71	39.0	126	11.0	75	3	20	13.5	78	220	14
17	SOA	71	39.0	126	11.0	75	3	20	14.5	82	220	13
18	SOA	71	39.0	126	11.0	75	3	20	15.5	82	220	14
20	S06	71	46.0	126	34.0	75	3	21	23.5	90	-	11

CON	STN	LAT DEG	LAT MIN	LON DEG	LON MIN	DATE YR	DATE MO	DATE DY	DATE HR	CAST TO (M)	WATER DEPTH (M)	PTS
21	S07	71	17.0	127	34.0	75	3	22	0.0	90	-	10
6	SOA	71	39.0	126	11.0	75	3	20	1.0	-	220	-
19	SOA	71	39.0	126	11.0	75	3	20	19.0	-	220	-
22	SOB	69	56.8	133	25.0	75	4	26	0.0	-	21	-
22	SOB	69	56.8	133	25.0	75	4	26	0.0	-	21	-
23	SOB	69	56.8	133	25.0	75	4	26	2.0	-	21	-
24	SOB	69	56.8	133	25.0	75	4	26	3.0	-	21	-
25	SOB	69	56.8	133	25.0	75	4	26	4.0	-	21	-
26	SOB	69	56.8	133	25.0	75	4	26	5.0	-	21	-
27	SOB	69	56.8	133	25.0	75	4	26	6.0	-	21	-
28	SOB	69	56.8	133	25.0	75	4	26	7.0	-	21	-
29	SOB	69	56.8	133	25.0	75	4	26	8.0	-	21	-
30	SOB	69	56.8	133	25.0	75	4	26	9.0	-	21	-
31	SOB	69	56.8	133	25.0	75	4	26	10.0	-	21	-
32	SOB	69	56.8	133	25.0	75	4	26	11.0	-	21	-
33	SOB	69	56.8	133	25.0	75	4	26	12.0	-	21	-
34	SOB	69	56.8	133	25.0	75	4	26	13.0	-	21	-
35	SOB	69	56.8	133	25.0	75	4	26	14.0	-	21	-
36	SOB	69	56.8	133	25.0	75	4	26	15.0	-	21	-
37	SOB	69	56.8	133	25.0	75	4	26	16.0	-	21	-
38	SOB	69	56.8	133	25.0	75	4	26	17.0	-	21	-
39	SOB	69	56.8	133	25.0	75	4	26	18.0	-	21	-
39	SOB	69	56.8	133	25.0	75	4	26	18.0	-	21	-
40	SOB	69	56.8	133	25.0	75	4	26	20.0	-	21	-
41	SOB	69	56.8	133	25.0	75	4	26	21.0	-	21	-
42	SOB	69	56.8	133	25.0	75	4	26	22.0	-	21	-
43	SOB	69	56.8	133	25.0	75	4	26	23.0	-	21	-
44	SOB	69	56.8	133	25.0	75	4	27	0.0	-	21	-
45	SOB	69	56.8	133	25.0	75	4	27	1.0	-	21	-
46	SOB	69	56.8	133	25.0	75	4	27	2.0	-	21	-
47	SOB	69	56.8	133	25.0	75	4	27	3.0	-	21	-
48	SOB	69	56.8	133	25.0	75	4	27	4.0	-	21	-
49	SOB	69	56.8	133	25.0	75	4	27	5.0	-	21	-
50	SOB	69	56.8	133	25.0	75	4	27	6.0	-	21	-
51	SOB	69	56.8	133	25.0	75	4	27	7.0	-	21	-
52	SOB	69	56.8	133	25.0	75	4	27	15.0	-	21	-
53	SOB	69	56.8	133	25.0	75	4	27	16.0	-	21	-
54	SOB	69	56.8	133	25.0	75	4	27	17.0	-	21	-
55	SOB	69	56.8	133	25.0	75	4	27	18.0	-	21	-
56	SOB	69	56.8	133	25.0	75	4	27	19.0	-	21	-
57	SOB	69	56.8	133	25.0	75	4	27	20.0	-	21	-
58	SOB	69	56.8	133	25.0	75	4	27	21.0	-	21	-
59	SOB	69	56.8	133	25.0	75	4	27	22.0	-	21	-
60	SOB	69	56.8	133	25.0	75	4	27	23.0	-	21	-
61	SOB	69	56.8	133	25.0	75	4	28	0.0	-	21	-
62	SOB	69	56.8	133	25.0	75	4	28	1.0	-	21	-

CON	STN	LAT DEG	LAT MIN	LON DEG	LON MIN	DATE YR	DATE MO	DATE DY	DATE HR	CAST TO (M)	WATER DEPTH (M)	PTS
63	SOB	69	56.8	133	25.0	75	4	28	2.0	-	21	-
64	SOB	69	56.8	133	25.0	75	4	28	3.0	-	21	-
65	SOB	69	56.8	133	25.0	75	4	28	4.0	-	21	-
66	SOB	69	56.8	133	25.0	75	4	28	5.0	-	21	-
67	SOB	69	56.8	133	25.0	75	4	28	14.0	-	21	-
68	SOC	69	36.7	137	58.1	75	5	1	5.0	-	76	-
69	SOC	69	36.7	137	58.1	75	5	1	6.0	-	76	-
70	SOC	69	36.7	137	58.1	75	5	1	7.0	-	76	-
71	SOC	69	36.7	137	58.1	75	5	1	8.0	-	76	-
72	SOC	69	35.0	133	58.0	75	5	1	9.0	-	76	-
73	SOC	69	36.7	137	58.1	75	5	1	10.0	-	76	-
74	SOC	69	36.7	137	58.1	75	5	1	11.0	-	76	-
75	SOC	69	36.7	137	58.1	75	5	1	12.0	-	76	-
76	SOC	69	36.7	137	58.1	75	5	1	13.0	-	76	-
77	SOC	69	36.7	137	58.1	75	5	1	14.0	-	76	-
78	SOC	69	36.7	137	58.1	75	5	1	15.0	-	76	-
79	SOC	69	36.7	137	58.1	75	5	1	16.0	-	76	-
80	SOC	69	36.7	137	58.1	75	5	1	17.0	-	76	-
81	SOC	69	36.7	137	58.1	75	5	1	18.0	-	76	-
82	SOC	69	36.7	137	58.1	75	5	1	19.0	-	76	-
83	SOC	69	36.7	137	58.1	75	5	1	20.0	-	76	-
84	SOC	69	36.7	137	58.1	75	5	1	21.0	-	76	-
85	SOC	69	36.7	137	58.1	75	5	1	22.0	-	76	-
86	SOC	69	36.7	137	58.1	75	5	1	23.0	-	76	-
87	SOC	69	36.7	137	58.1	75	5	2	0.0	-	76	-
88	SOC	69	36.7	137	58.1	75	5	2	1.0	-	76	-
89	SOC	69	36.7	137	58.1	75	5	2	2.0	-	76	-
90	SOC	69	36.7	137	58.1	75	5	2	3.0	-	76	-
91	SOC	69	36.7	137	58.1	75	5	2	4.0	-	76	-
92	SOC	69	36.7	137	58.1	75	5	2	5.0	-	76	-
93	SOC	69	36.7	137	58.1	75	5	2	7.0	-	76	-
94	SOC	69	36.7	137	58.1	75	5	2	9.0	-	76	-
95	SOC	69	36.7	137	58.1	75	5	2	10.0	-	76	-
96	SOC	69	36.7	137	58.1	75	5	2	11.0	-	76	-
97	SOC	69	36.7	137	58.1	75	5	2	12.0	-	76	-
98	SOC	69	36.7	137	58.1	75	5	2	13.0	-	76	-
99	SOC	69	36.7	137	58.1	75	5	2	14.0	-	76	-
100	SOC	69	36.7	137	58.1	75	5	2	15.0	-	76	-
101	SOC	69	36.7	137	58.1	75	5	2	16.0	-	76	-
102	SOC	69	36.7	137	58.1	75	5	2	17.0	-	76	-
103	SOC	69	36.7	137	58.1	75	5	2	18.0	-	76	-
104	SOC	69	36.7	137	58.1	75	5	2	19.0	-	76	-
105	SOC	69	36.7	137	58.1	75	5	2	20.0	-	76	-
106	SOC	69	36.7	137	58.1	75	5	2	21.0	-	76	-
107	SOC	69	36.7	137	58.1	75	5	2	22.0	-	76	-
108	SOC	69	36.7	137	58.1	75	5	2	23.0	-	76	-

CON	STN	LAT		LON		DATE				CAST TO (M)	WATER DEPTH (M)	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR			
109	SOC	69	36.7	137	58.1	75	5	3	0.0	-	76	-
110	SOC	69	36.7	137	58.1	75	5	3	1.0	-	76	-
111	SOC	69	36.7	137	58.1	75	5	3	2.0	-	76	-
112	SOC	69	36.7	137	58.1	75	5	3	3.0	-	76	-
113	SOC	69	36.7	137	58.1	75	5	3	4.0	-	76	-
114	SOC	69	36.7	137	58.1	75	5	3	5.0	-	76	-
115	SOC	69	36.7	137	58.1	75	5	3	6.0	-	76	-
116	SOC	69	36.7	137	58.1	75	5	3	14.0	-	76	-
117	SOC	69	36.7	137	58.1	75	5	3	15.0	-	76	-
118	SOC	69	36.7	137	58.1	75	5	3	17.0	-	76	-
119	SOC	69	36.7	137	58.1	75	5	3	19.0	-	76	-
120	SOC	69	36.7	137	58.1	75	5	3	21.0	-	76	-
121	S21	70	6.5	131	21.0	75	5	5	22.0	-	16	-
121	S22	70	25.2	131	53.0	75	5	5	22.0	-	35	-
122	S23	70	25.2	132	18.2	75	5	6	0.0	-	35	-
122	S24	70	13.2	132	44.2	75	5	6	0.0	-	31	-
123	S25	69	58.6	132	56.6	75	5	6	1.0	-	18	-
124	S26	69	59.3	133	10.0	75	5	9	20.0	-	21	-
124	S27	70	22.8	133	24.3	75	5	9	20.0	-	49	-
125	S28	70	43.8	133	26.8	75	5	9	21.0	-	60	-
126	S29	71	9.2	133	32.5	75	5	9	22.0	-	86	-
127	S30	71	18.3	134	45.3	75	5	9	23.0	-	900	-
128	S31	70	44.1	134	44.8	75	5	10	0.0	-	56	-
129	S32	70	21.3	134	36.8	75	5	10	1.0	-	41	-
129	S33	70	6.6	134	29.4	75	5	10	1.0	-	21	-
130	S34	69	51.4	134	8.8	75	5	10	2.0	-	6	-
131	S35	69	38.7	137	5.0	75	5	10	16.0	-	34	-
132	S36	69	52.3	137	2.6	75	5	10	17.0	-	35	-

BOTTLE /CTD DATA SET NUMBER:75-0002 YEAR: 1975

CON	STN	LAT		LON		DATE				CAST TO (M)	WATER DEPTH (M)	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR			
16	CNM	70	10.6	132	58.9	75	8	14	16.5	27	27	10
17	CNM	70	10.6	132	58.9	75	8	14	17.5	27	27	10
19	CNM	70	10.6	132	58.9	75	8	14	21.2	27	27	10
21	CNM	70	10.6	132	58.9	75	8	15	.8	27	27	10
22	CNM	70	10.6	132	58.9	75	8	15	3.0	27	27	10
26	CNM	70	10.6	132	58.9	75	8	15	15.3	27	27	10
27	CNM	70	10.6	132	58.9	75	8	15	18.0	27	27	10
29	CNM	70	10.6	132	58.9	75	8	16	0.0	27	27	10
31	CNM	70	10.6	132	58.9	75	8	16	2.5	27	27	10

CON	STN	LAT		LON		DATE				CAST TO (M)	WATER DEPTH (M)	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR			
32	CNM	70	10.6	132	58.9	75	8	16	6.0	27	27	10
33	CNM	70	10.6	132	58.9	75	8	16	8.0	24	27	9
36	CNM	70	10.6	132	58.9	75	8	16	12.0	15	27	6
38	CNM	70	10.6	132	58.9	75	8	16	17.5	27	27	10
39	CNM	70	10.6	132	58.9	75	8	16	19.1	27	27	10
40	CNM	70	10.6	132	58.9	75	8	16	21.0	27	27	10
42	CNM	70	10.6	132	58.9	75	8	17	0.0	27	27	10
1	S02	70	40.9	134	45.2	75	8	5	19.0	-	50	-
2	S03	69	57.7	135	16.0	75	8	6	19.0	-	20	-
3	S04	70	53.2	132	28.0	75	8	7	17.0	-	50	-
4	S05	71	18.9	130	36.5	75	8	8	2.0	-	50	-
5	S06	70	9.2	132	14.6	75	8	8	15.0	-	20	-
6	S07	69	34.2	138	55.0	75	8	10	0.0	-	10	-
6	S07	69	34.2	138	55.0	75	8	10	0.0	-	7	-
6	S07	69	34.2	138	55.0	75	8	10	0.0	-	7	-
7	S07	69	34.2	138	55.0	75	8	10	21.0	-	7	-
7	S07	69	34.2	138	55.0	75	8	10	21.0	-	7	-
8	S08	69	22.0	137	30.0	75	8	11	15.0	-	15	-
8	S08	69	22.0	137	30.0	75	8	11	15.0	-	15	-
9	S09	70	3.9	137	41.5	75	8	13	0.0	-	75	-
10	S10	70	7.3	137	20.5	75	8	13	6.0	-	30	-
11	S11	69	51.9	136	0.0	75	8	13	13.0	-	15	-
11	S11	69	51.9	136	0.0	75	8	13	13.0	-	15	-
12	S12	70	8.0	136	3.0	75	8	13	20.0	-	30	-
13	S13	70	26.5	134	58.9	75	8	14	0.0	-	50	-
14	S14	70	20.1	134	45.1	75	8	14	5.0	-	30	-
15	S15	70	.9	133	59.9	75	8	14	14.0	-	15	-
18	S16	70	19.8	134	.2	75	8	14	21.0	-	30	-
20	S17	70	41.0	133	53.7	75	8	15	0.0	-	50	-
23	S18	70	31.1	133	40.1	75	8	15	7.0	-	50	-
24	S19	70	10.0	133	20.0	75	8	15	10.0	-	20	-
25	S20	70	.2	132	59.6	75	8	15	14.0	-	10	-
28	S21	70	30.0	133	.5	75	8	15	21.0	-	30	-
30	S22	70	55.2	133	22.7	75	8	16	2.0	-	50	-
34	S23	70	31.9	132	49.2	75	8	16	9.0	-	30	-
35	S24	70	19.9	132	20.3	75	8	16	11.0	-	20	-
37	S25	70	.8	132	.7	75	8	16	14.0	-	10	-
37	S25	70	.8	132	.7	75	8	16	14.0	-	10	-
41	S26	70	29.4	132	2.2	75	8	16	22.0	-	30	-
43	S27	70	59.9	132	2.7	75	8	17	2.0	-	50	-
44	S28	70	45.3	131	28.4	75	8	17	9.0	-	30	-
45	S29	70	30.9	131	30.9	75	8	17	11.0	-	30	-
46	S30	70	19.3	131	1.8	75	8	17	14.0	-	15	-
47	S31	70	50.3	131	9.4	75	8	17	21.0	-	30	-
48	S32	71	10.8	131	11.2	75	8	18	1.0	-	50	-
49	S33	71	.7	130	36.3	75	8	18	6.0	-	30	-

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO (M)	DEPTH (M)	
50	S34	70	23.8	130	13.0	75	8	18	16.0	-	15	-
51	S35	70	56.5	129	59.5	75	8	18	21.0	-	30	-
52	S36	71	23.3	130	.8	75	8	19	1.0	-	50	-
53	S38	69	53.8	134	58.1	75	8	20	4.0	-	10	-
54	S39	70	14.4	134	58.2	75	8	20	10.0	-	30	-
55	S40	70	27.6	136	.1	75	8	20	14.0	-	50	-
56	S41	70	18.7	136	38.2	75	8	20	18.0	-	50	-
57	S42	70	.6	136	33.4	75	8	20	23.0	-	20	-
58	S43	69	43.8	136	36.0	75	8	21	4.0	-	10	-
59	S44	69	38.0	137	19.2	75	8	21	8.0	-	30	-
60	S45	69	44.8	138	7.0	75	8	21	14.0	-	124	-
61	S46	69	25.0	138	4.0	75	8	21	20.0	-	50	-
62	S47	69	13.5	137	55.0	75	8	22	0.0	-	20	-
63	S48	70	10.0	133	25.0	75	8	23	10.0	-	20	-
64	S48	70	10.0	133	25.0	75	8	23	11.0	-	20	-
65	S48	70	10.0	133	25.0	75	8	23	12.0	-	20	-
66	S48	70	10.0	133	25.0	75	8	23	13.0	-	20	-
67	S48	70	10.0	133	25.0	75	8	23	14.0	-	20	-
68	S48	70	10.0	133	25.0	75	8	23	15.0	-	20	-
69	S48	70	10.0	133	25.0	75	8	23	16.0	-	20	-
70	S48	70	10.0	133	25.0	75	8	23	17.0	-	20	-
71	S48	70	10.0	133	25.0	75	8	23	18.0	-	20	-
72	S48	70	10.0	133	25.0	75	8	23	19.0	-	20	-
72	S48	70	10.0	133	25.0	75	8	23	19.0	-	20	-
73	S48	70	10.0	133	25.0	75	8	23	21.0	-	20	-
74	S48	70	10.0	133	25.0	75	8	23	22.0	-	20	-
75	S48	70	10.0	133	25.0	75	8	24	0.0	-	20	-
75	S48	70	10.0	133	25.0	75	8	24	0.0	-	20	-
76	S48	70	10.0	133	25.0	75	8	24	2.0	-	20	-
77	S48	70	10.0	133	25.0	75	8	24	3.0	-	20	-
78	S48	70	10.0	133	25.0	75	8	24	4.0	-	20	-
79	S48	70	10.0	133	25.0	75	8	24	5.0	-	20	-
80	S48	70	10.0	133	25.0	75	8	24	6.0	-	20	-
81	S48	70	10.0	133	25.0	75	8	24	7.0	-	20	-
82	S48	70	10.0	133	25.0	75	8	24	8.0	-	20	-
83	S48	70	10.0	133	25.0	75	8	24	9.0	-	20	-
84	S48	70	10.0	133	25.0	75	8	24	10.0	-	20	-

BOTTLE /CTD DATA SET NUMBER:75-0004   YEAR: 1975

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO (M)	DEPTH (M)	
1	1	69	54.9	134	17.0	75	7	31	-	10	10	5
2	1	69	54.9	134	17.0	75	8	3	-	1	10	1
3	2	69	48.8	133	58.2	75	7	17	-	5	5	6
4	2	69	48.8	133	58.2	75	8	2	-	5	5	2
5	2	69	48.8	133	58.2	75	8	20	-	3	5	6
6	7	69	46.0	135	57.8	75	7	28	-	9	11	7
7	8	69	32.7	135	57.0	75	7	28	-	3	5	3
8	8	69	32.7	135	57.0	75	8	4	-	1	5	1
9	8	69	32.7	135	57.0	75	8	16	-	5	5	6
10	9	69	37.4	135	54.2	75	8	16	-	7	8	8
11	10	69	32.3	135	44.4	75	8	3	-	1	3	1
12	11	69	49.1	134	36.3	75	7	13	-	7	7	3
13	11	69	49.1	134	36.3	75	7	31	-	5	7	3
14	11	69	49.1	134	36.3	75	8	3	-	1	7	2
15	12	69	42.2	134	35.8	75	7	11	-	3	4	3
16	12	69	42.2	134	35.8	75	7	30	-	4	4	1
17	12	69	42.2	134	35.8	75	8	3	-	1	4	3
18	14	69	33.7	134	36.3	75	8	3	-	0	2	3
19	14	69	33.7	134	36.3	75	8	15	-	2	2	3
20	16	69	37.1	135	10.5	75	7	10	-	3	3	3
21	16	69	37.1	135	10.5	75	7	30	-	3	3	3
22	16	69	37.1	135	10.5	75	8	3	-	1	3	1
23	17	69	40.0	135	13.0	75	8	3	-	1	5	1
24	19	69	30.5	135	37.5	75	8	3	-	1	2	1
25	21	69	27.5	135	49.6	75	8	4	-	1	2	1
26	21	69	27.5	135	49.6	75	8	16	-	2	2	3
27	22	69	25.0	135	49.7	75	8	4	-	1	2	1
28	26	69	44.7	134	21.3	75	7	18	-	2	4	2
29	26	69	44.7	134	21.3	75	8	2	-	4	4	2
30	26	69	44.7	134	21.3	75	8	3	-	4	4	2
31	26	69	44.7	134	21.3	75	8	20	-	4	4	3
32	29	69	28.8	135	47.9	75	7	8	-	1	6	1
33	29	69	28.8	135	47.9	75	8	7	-	1	6	1
34	30	69	29.9	135	45.2	75	7	8	-	1	3	1
35	30	69	29.9	135	45.2	75	8	11	-	3	3	2
36	31	69	37.1	135	18.2	75	8	10	-	1	3	1
37	31	69	37.1	135	18.2	75	8	12	-	3	3	2
38	32	69	33.3	135	33.5	75	8	11	-	3	3	2
39	33	69	42.1	134	49.7	75	7	9	-	1	3	1
40	34	69	41.7	134	49.5	75	7	9	-	1	1	1
42	57	69	30.6	135	44.7	75	7	8	-	1	1	1
43	58	69	30.3	135	21.8	75	7	17	-	2	2	2
44	58	69	30.3	135	21.8	75	8	12	-	2	2	2
45	59	69	37.5	135	18.6	75	8	2	-	5	5	2
46	60	69	44.9	133	40.2	75	8	2	-	6	5	2

CON	STN	LAT DEG	LAT MIN	LON DEG	LON MIN	DATE YR	DATE MO	DATE DY	HR	CAST TO (M)	WATER DEPTH (M)	PTS
47	60	69	44.9	133	40.2	75	8	20	-	5	5	6
48	62	69	24.3	135	49.3	75	7	26	-	1	1	2
49	62	69	24.3	135	49.3	75	8	13	-	1	1	2
50	67	69	35.1	134	8.9	75	7	16	-	5	5	2
51	69	69	32.9	134	1.3	75	7	13	-	1	1	1
52	70	69	28.9	133	7.4	75	7	14	-	1	1	2
53	71	69	18.5	136	9.0	75	8	18	-	2	2	3
54	73	69	40.4	133	20.3	75	7	15	-	5	5	9
55	73	69	40.4	133	20.3	75	8	2	-	5	5	4
56	73	69	40.4	133	20.3	75	8	20	-	5	5	4
57	74	69	35.7	133	9.5	75	7	15	-	5	5	10
58	74	69	35.7	133	9.5	75	8	2	-	5	5	2
59	74	69	35.7	133	9.5	75	8	20	-	5	5	4
60	75	69	31.5	133	6.5	75	7	15	-	5	5	8
61	75	69	31.5	133	6.5	75	8	20	-	5	5	5
62	76	69	27.8	133	18.4	75	8	20	-	4	4	4
63	77	69	33.9	133	30.3	75	7	15	-	4	4	4
64	77	69	33.9	133	30.3	75	8	20	-	4	4	4
65	78	69	36.9	133	25.6	75	7	15	-	5	5	8
66	78	69	36.9	133	25.6	75	8	2	-	5	5	2
67	79	69	40.3	133	51.0	75	8	2	-	6	4	2
68	79	69	40.3	133	51.0	75	8	20	-	4	4	5
69	80	69	42.7	134	8.3	75	8	20	-	4	4	4
70	81	69	45.2	134	36.6	75	8	3	-	1	5	1
71	83	69	25.6	132	57.8	75	7	14	-	1	2	1

BOTTLE /CTD DATA SET NUMBER:75-0006   YEAR: 1975

CON	STN	LAT DEG	LAT MIN	LON DEG	LON MIN	DATE YR	DATE MO	DATE DY	HR	CAST TO (M)	WATER DEPTH (M)	PTS
1	1	70	15.0	139	4.3	75	8	5	7.3	405	453	15
3	2	70	40.7	134	42.9	75	8	5	20.8	50	55	11
2	3	70	.4	135	28.2	75	8	5	19.6	30	33	9
4	4	70	54.0	132	28.2	75	8	7	17.9	60	64	12
5	5	71	18.9	130	36.5	75	8	8	3.6	70	72	12
6	6	70	9.2	132	14.6	75	8	8	16.8	25	30	9
7	7	69	33.5	138	55.5	75	8	9	19.5	7	9	4
8	8	69	34.7	137	29.4	75	8	12	17.1	15	20	6
9	9	70	5.4	137	36.6	75	8	13	2.3	75	83	12
10	11	69	51.8	136	.3	75	8	13	14.7	15	17	6
11	13	70	27.5	134	53.1	75	8	14	1.7	50	50	10
12	15	70	1.7	134	3.1	75	8	14	15.4	17	20	7

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO (M)	DEPTH (M)	
13	16	70	20.9	133	56.5	75	8	14	21.5	40	48	9
14	17	70	39.5	133	60.5	75	8	15	2.0	55	64	11
15	20	70	.3	133	1.2	75	8	15	13.0	10	14	5
16	21	70	30.0	133	.5	75	8	15	22.1	40	38	9
17	22	70	54.8	133	22.0	75	8	16	3.1	65	70	12
18	25	70	.7	132	.3	75	8	16	15.0	10	15	5
19	26	70	29.4	132	2.2	75	8	16	22.6	30	35	9
20	27	70	59.6	132	3.3	75	8	17	3.7	60	65	11
21	30	70	19.6	131	2.3	75	8	17	14.9	15	18	6
22	31	70	50.3	131	9.4	75	8	17	22.3	40	50	9
23	32	71	10.5	131	15.4	75	8	18	2.0	68	80	12
24	34	70	22.9	130	19.4	75	8	18	16.8	13	18	6
25	35	70	56.5	129	59.5	75	8	18	22.4	29	35	8
26	36	71	22.7	130	12.3	75	8	19	2.3	42	73	11
27	37	69	49.0	133	20.8	75	8	19	15.6	7	10	4
28	38	69	53.7	134	57.8	75	8	20	4.5	11	14	5
29	39	70	14.4	134	58.2	75	8	20	10.7	40	45	9
30	40	70	26.3	136	8.5	75	8	20	15.5	50	58	10
31	41	70	19.3	136	40.1	75	8	20	19.0	50	60	10
32	42	70	.6	136	33.4	75	8	21	.1	25	30	8
33	43	69	42.7	136	33.6	75	8	21	5.0	12	15	6
34	44	69	37.8	137	19.5	75	8	21	8.8	39	48	9
35	45	69	44.7	138	7.1	75	8	21	16.6	140	155	13
35	46	69	25.0	138	2.0	75	8	21	16.6	60	65	11
36	47	69	13.5	137	54.0	75	8	22	.8	25	27	8
37	48	70	10.0	133	25.0	75	8	23	10.3	23	28	6
38	48	70	10.0	133	25.0	75	8	23	11.3	23	28	6
39	48	70	10.0	133	25.0	75	8	23	12.2	25	28	6
40	48	70	10.0	133	25.0	75	8	23	13.4	25	28	6
41	48	70	10.0	133	25.0	75	8	23	14.3	25	28	6

BOTTLE /CTD DATA SET NUMBER:75-0009 YEAR: 1975

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO (M)	DEPTH (M)	
1	101	69	54.0	134	9.0	75	8	20	18.0	10	13	5
2	102	70	5.0	134	26.0	75	8	20	23.3	23	26	9
3	104	70	15.5	134	41.6	75	8	21	2.2	40	40	8
4	105	70	22.5	134	58.3	75	8	21	5.3	50	57	8
5	106	70	34.0	135	26.0	75	8	21	7.9	62	66	10
6	107	70	39.0	135	39.0	75	8	21	10.8	153	155	18
7	109	69	36.8	139	32.8	75	8	23	20.6	12	14	4

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO	DEPTH	
										(M)	(M)	
8	110	69	48.5	139	39.3	75	8	23	23.0	34	36	8
9	111	69	57.6	139	31.2	75	8	24	1.3	50	53	8
10	112	70	8.2	139	25.4	75	8	24	3.8	150	187	14
11	153	69	29.9	138	47.8	75	9	2	21.0	72	76	10
12	168	69	50.5	136	18.9	75	9	5	18.8	17	19	5
13	172	70	13.0	132	43.6	75	9	7	1.2	30	35	6
14	173	70	24.3	132	55.0	75	9	7	2.2	40	42	8
15	174	70	8.2	133	1.0	75	9	7	5.4	50	53	8
16	175	70	47.5	133	23.0	75	9	7	16.0	60	65	9
17	179	70	2.8	132	30.8	75	9	8	15.3	20	21	5
18	180	69	53.1	132	21.3	75	9	8	17.2	8	11	2
19	183	69	56.7	133	3.0	75	9	8	19.8	0	17	1
20	184	69	58.3	133	50.0	75	9	8	21.4	0	21	1
21	188	69	59.5	134	24.5	75	9	8	23.8	0	17	1
22	189	70	9.3	133	58.0	75	9	9	1.9	0	36	1
23	189	70	16.4	133	34.8	75	9	9	17.7	0	53	1

BOTTLE /CTD DATA SET NUMBER:75-0010   YEAR: 1975

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO	DEPTH	
										(M)	(M)	
1	508	69	34.8	131	18.0	75	2	28	5.2	20	24	7
2	515	69	32.0	131	11.0	75	2	29	3.7	40	48	6

BOTTLE /CTD DATA SET NUMBER:75-0010   YEAR: 1975

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO	DEPTH	
										(M)	(M)	
1	515	69	32.0	131	11.0	75	6	15	22.3	40	48	7
2	515	69	32.0	131	11.0	75	6	27	1.0	35	37	6
3	515	69	32.0	131	11.0	75	7	3	2.2	40	49	7
4	515	69	32.0	131	11.0	75	7	9	18.0	40	43	7
5	515	69	32.0	131	11.0	75	7	15	15.2	40	48	7
6	515	69	32.0	131	11.0	75	7	21	19.5	20	40	3

BOTTLE /CTD DATA SET NUMBER:75-0011 YEAR: 1975

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO (M)	DEPTH (M)	
2	1	69	22.4	134	53.1	75	4	11	-	0	-	1
1	12	69	21.4	134	56.6	75	4	9	-	0	-	1
2	18	69	22.0	134	57.2	75	4	11	-	0	-	1
34	1	69	22.4	134	53.1	75	6	10	-	0	-	1
34	12	69	21.4	134	56.6	75	6	10	-	0	-	1
34	18	69	22.0	134	57.2	75	6	10	-	0	-	1
30	19	69	22.5	134	58.8	75	6	8	-	0	-	1
101	1	69	22.4	134	53.1	75	6	21	-	0	-	1
101	6	69	24.7	134	50.7	75	6	21	-	0	-	1
101	7	69	24.6	134	49.5	75	6	21	-	0	-	1
101	9	69	23.0	134	51.1	75	6	21	-	0	-	1
101	10	69	23.4	134	50.1	75	6	21	-	0	-	1
121	1	69	22.4	134	53.1	75	8	16	-	0	-	1
121	6	69	22.4	134	50.7	75	8	16	-	0	-	1
121	7	69	24.6	134	49.5	75	8	16	-	0	-	1
121	9	69	23.0	134	51.1	75	8	16	-	0	-	1
121	10	69	23.4	134	50.1	75	8	16	-	0	-	1
132	1	69	22.4	134	53.1	75	9	27	-	0	-	1
132	6	69	24.7	134	50.7	75	9	27	-	0	-	1
132	7	69	24.6	134	49.5	75	9	27	-	0	-	1
132	9	69	23.0	134	51.1	75	9	27	-	0	-	1
132	10	69	23.4	134	50.1	75	9	27	-	0	-	1
132	11	69	23.8	134	50.9	75	9	27	-	0	-	1
132	12	69	21.4	134	56.6	75	9	27	-	0	-	1
132	18	69	22.0	134	57.2	75	9	27	-	0	-	1
132	19	69	22.5	134	58.8	75	9	27	-	0	-	1
135	20	99	99.9	999	99.9	75	9	29	-	0	-	1
3	18	69	22.0	134	57.2	75	5	31	11.0	0	-	1
4	18	69	22.0	134	57.2	75	5	31	15.2	0	-	1
5	18	69	22.0	134	57.2	75	5	31	20.0	0	-	1
6	18	69	22.0	134	57.2	75	6	1	8.0	0	-	1
7	18	69	22.0	134	57.2	75	6	1	14.0	0	-	1
8	18	69	22.0	134	57.2	75	6	1	20.0	0	-	1
9	18	69	22.0	134	57.2	75	6	2	8.0	0	-	1
10	18	69	22.0	134	57.2	75	6	2	14.0	0	-	1
11	18	69	22.0	134	57.2	75	6	2	20.0	0	-	1
12	18	69	22.0	134	57.2	75	6	3	8.0	0	-	1
13	18	69	22.0	134	57.2	75	6	3	15.0	0	-	1
14	18	69	22.0	134	57.2	75	6	3	20.0	0	-	1
15	18	69	22.0	134	57.2	75	6	4	8.0	0	-	1
16	18	69	22.0	134	57.2	75	6	4	14.0	0	-	1
17	18	69	22.0	134	57.2	75	6	4	20.0	0	-	1
18	18	69	22.0	134	57.2	75	6	5	8.0	0	-	1
19	18	69	22.0	134	57.2	75	6	5	14.0	0	-	1
20	18	69	22.0	134	57.2	75	6	5	20.0	0	-	1

CON	STN	LAT		LON		DATE				CAST TO (M)	WATER DEPTH (M)	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR			
21	18	69	22.0	134	57.2	75	6	6	8.0	0	-	1
22	18	69	22.0	134	57.2	75	6	6	14.0	0	-	1
23	18	69	22.0	134	57.2	75	6	6	20.0	0	-	1
24	18	69	22.0	134	57.2	75	6	7	8.0	0	-	1
25	18	69	22.0	134	57.2	75	6	7	15.0	0	-	1
26	18	69	22.0	134	57.2	75	6	7	20.0	0	-	1
27	18	69	22.0	134	57.2	75	6	8	8.0	0	-	1
28	18	69	22.0	134	57.2	75	6	8	14.0	0	-	1
29	18	69	22.0	134	57.2	75	6	8	20.0	0	-	1
31	18	69	22.0	134	57.2	75	6	9	8.0	0	-	1
32	18	69	22.0	134	57.2	75	6	10	8.0	0	-	1
33	18	69	22.0	134	57.2	75	6	10	20.0	0	-	1
35	18	69	22.0	134	57.2	75	6	11	8.0	0	-	1
36	18	69	22.0	134	57.2	75	6	11	14.0	0	-	1
37	18	69	22.0	134	57.2	75	6	11	20.0	0	-	1
38	18	69	22.0	134	57.2	75	6	12	8.0	0	-	1
39	18	69	22.0	134	57.2	75	6	12	20.0	0	-	1
45	18	69	22.0	134	57.2	75	6	13	8.0	0	-	1
46	18	69	22.0	134	57.2	75	6	13	20.0	0	-	1
48	18	69	22.0	134	57.2	75	6	14	8.0	0	-	1
55	18	69	22.0	134	57.2	75	6	14	17.5	0	-	1
56	18	69	22.0	134	57.2	75	6	14	20.0	0	-	1
57	18	69	22.0	134	57.2	75	6	15	9.5	0	-	1
59	18	69	22.0	134	57.2	75	6	15	16.5	0	-	1
60	18	69	22.0	134	57.2	75	6	15	20.0	0	-	1
61	18	69	22.0	134	57.2	75	6	16	8.0	0	-	1
68	18	69	22.0	134	57.2	75	6	16	20.5	0	-	1
69	18	69	22.0	134	57.2	75	6	17	8.0	0	-	1
76	18	69	22.0	134	57.2	75	6	17	20.0	0	-	1
77	18	69	22.0	134	57.2	75	6	18	8.0	0	-	1
83	18	69	22.0	134	57.2	75	6	18	20.0	0	-	1
84	18	69	22.0	134	57.2	75	6	19	8.0	0	-	1
91	18	69	22.0	134	57.2	75	6	19	20.0	0	-	1
92	18	69	22.0	134	57.2	75	6	20	20.0	0	-	1
93	18	69	22.0	134	57.2	75	6	21	8.0	0	-	1
100	18	69	22.0	134	57.2	75	6	21	20.0	0	-	1
102	18	69	22.0	134	57.2	75	6	22	8.0	0	-	1
44	1	69	22.4	134	53.1	75	6	12	23.2	0	-	1
54	1	69	22.4	134	53.1	75	6	14	15.3	0	-	1
67	1	69	22.4	134	53.1	75	6	16	17.0	0	-	1
75	1	69	22.4	134	53.1	75	6	17	15.8	0	-	1
82	1	69	22.4	134	53.1	75	6	18	17.5	0	-	1
90	1	69	22.4	134	53.1	75	6	19	15.1	0	-	1
99	1	69	22.4	134	53.1	75	6	21	18.2	0	-	1
107	1	69	22.4	134	53.1	75	7	9	18.5	0	-	1
108	1	69	22.4	134	53.1	75	7	10	10.8	0	-	1

CON	STN	LAT		LON		DATE				CAST TO (M)	WATER DEPTH (M)	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR			
117	1	69	22.4	134	53.1	75	8	15	14.0	0	-	1
118	1	69	22.4	134	53.1	75	8	16	12.8	0	-	1
130	6	69	24.7	134	50.7	75	9	27	14.2	0	-	1
41	6	69	24.7	134	50.7	75	6	12	22.0	0	-	1
51	6	69	24.7	134	50.7	75	6	14	12.5	0	-	1
63	6	69	24.7	134	50.7	75	6	16	13.5	0	-	1
71	6	69	24.7	134	50.7	75	6	17	12.8	0	-	1
78	6	69	24.7	134	50.7	75	6	18	13.9	0	-	1
86	6	69	24.7	134	50.7	75	6	19	14.1	0	-	1
95	6	69	24.7	134	50.7	75	6	21	13.5	0	-	1
104	6	69	24.7	134	50.7	75	7	9	16.8	0	-	1
110	6	69	24.7	134	50.7	75	7	10	12.8	0	-	1
114	6	69	24.7	134	50.7	75	8	15	13.2	0	-	1
118	6	69	24.7	134	50.7	75	8	16	12.8	0	-	1
128	6	69	24.7	134	50.7	75	9	27	12.2	0	-	1
40	7	69	24.6	134	49.5	75	6	12	21.7	0	-	1
50	7	69	24.6	134	49.5	75	6	14	12.3	0	-	1
62	7	69	24.6	134	49.5	75	6	16	13.2	0	-	1
70	7	69	24.6	134	49.5	75	6	17	12.6	0	-	1
85	7	69	24.6	134	49.5	75	6	19	13.9	0	-	1
94	7	69	24.6	134	49.5	75	6	21	13.2	0	-	1
103	7	69	24.6	134	49.5	75	7	9	16.7	0	-	1
109	7	69	24.6	134	49.5	75	7	10	11.5	0	-	1
113	7	69	24.6	134	49.5	75	8	15	12.9	0	-	1
118	7	69	24.6	134	49.5	75	8	16	12.9	0	-	1
127	7	69	24.6	134	49.5	75	9	27	11.5	0	-	1
43	9	69	23.0	134	51.1	75	6	12	22.9	0	-	1
53	9	69	23.0	134	51.1	75	6	14	15.0	0	-	1
66	9	69	23.0	134	51.1	75	6	16	16.5	0	-	1
74	9	69	23.0	134	51.1	75	6	17	15.5	0	-	1
81	9	69	23.0	134	51.1	75	6	18	17.1	0	-	1
89	9	69	23.0	134	51.1	75	6	19	15.0	0	-	1
98	9	69	23.0	134	51.1	75	6	21	17.8	0	-	1
106	9	69	23.0	134	51.1	75	7	9	18.0	0	-	1
112	9	69	23.0	134	51.1	75	7	10	20.8	0	-	1
116	9	69	23.0	134	51.1	75	8	15	13.8	0	-	1
120	9	69	23.0	134	51.1	75	8	16	14.2	0	-	1
132	9	69	23.0	134	51.1	75	9	27	-	0	-	1
42	10	69	23.4	134	50.1	75	6	12	22.7	0	-	1
52	10	69	23.4	134	50.1	75	6	14	14.8	0	-	1
65	10	69	23.4	134	50.1	75	6	16	16.2	0	-	1
73	10	69	23.4	134	50.1	75	6	17	15.2	0	-	1
80	10	69	23.4	134	50.1	75	6	18	16.5	0	-	1
88	10	69	23.4	134	50.1	75	6	19	14.9	0	-	1
97	10	69	23.4	134	50.1	75	6	21	17.3	0	-	1
105	10	69	23.4	134	50.1	75	7	9	17.8	0	-	1

CON	STN	LAT		LON		DATE				CAST TO (M)	WATER DEPTH (M)	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR			
111	10	69	23.4	134	50.1	75	7	10	20.7	0	-	1
115	10	69	23.4	134	50.1	75	8	15	13.6	0	-	1
119	10	69	23.4	134	50.1	75	8	16	13.9	0	-	1
122	10	69	23.4	134	50.1	75	8	27	13.0	0	-	1
47	11	69	23.8	134	50.9	75	6	13	23.5	0	-	1
49	11	69	23.8	134	50.9	75	6	14	12.0	0	-	1
58	11	69	23.8	134	50.9	75	6	15	12.0	0	-	1
64	11	69	23.8	134	50.9	75	6	16	13.9	0	-	1
72	11	69	23.8	134	50.9	75	6	17	15.0	0	-	1
79	11	69	23.8	134	50.9	75	6	18	16.2	0	-	1
87	11	69	23.8	134	50.9	75	6	19	14.6	0	-	1
96	11	69	23.8	134	50.9	75	6	21	14.6	0	-	1
102	11	69	23.8	134	50.9	75	6	22	14.1	0	-	1
129	11	69	23.8	134	50.9	75	9	27	13.5	0	-	1
123	18	69	22.0	134	57.2	75	9	25	9.0	0	-	1
124	18	69	22.0	134	57.2	75	9	25	21.0	0	-	1
125	18	69	22.0	134	57.2	75	9	26	19.0	0	-	1
126	18	69	22.0	134	57.2	75	9	27	8.5	0	-	1
131	18	69	22.0	134	57.2	75	9	27	21.0	0	-	1
133	18	69	22.0	134	57.2	75	9	28	21.0	0	-	1
134	18	69	22.0	134	57.2	75	9	29	9.0	0	-	1

BOTTLE /CTD DATA SET NUMBER:75-0012   YEAR: 1975

CON	STN	LAT		LON		DATE				CAST TO (M)	WATER DEPTH (M)	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR			
4	562	69	35.0	133	5.0	75	5	5	22.0	1	0	1
5	563	69	27.0	133	1.0	75	5	9	19.0	1	0	1
6	564	69	40.0	132	40.0	75	5	9	22.0	1	0	1
9	565	70	8.0	132	37.0	75	6	17	14.1	30	31	8
10	566	70	6.0	138	56.0	75	7	5	22.0	315	318	11
14	567	70	49.0	136	22.0	75	7	12	24.0	720	720	13
28	568	70	14.0	139	4.0	75	7	18	13.3	403	408	12
11	601	69	23.3	133	47.0	75	7	11	14.3	2	2	2
12	602	69	18.6	133	54.5	75	7	12	.6	9	10	5
13	603	69	15.6	134	10.0	75	7	12	2.6	7	8	5
15	604	69	32.3	133	52.5	75	7	13	16.1	3	4	3
16	605	69	30.3	133	55.0	75	7	13	20.3	14	15	7
17	606	69	31.8	133	57.0	75	7	13	24.0	15	15	7
18	607	69	34.3	134	9.0	75	7	14	16.9	25	26	8
19	608	69	32.3	134	9.4	75	7	14	21.9	3	4	1
20	609	69	32.9	134	7.5	75	7	14	23.0	11	11	6

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO (M)	DEPTH (M)	
21	610	69	33.5	134	5.0	75	7	15	.9	18	18	7
22	611	69	34.3	134	3.0	75	7	15	18.3	2	3	3
23	606	69	31.8	133	57.0	75	7	16	18.5	14	14	7
24	607	69	34.3	134	9.0	75	7	16	20.3	25	26	8
25	608	69	32.3	134	9.3	75	7	17	5.3	3	3	3
26	612	69	35.9	133	58.5	75	7	17	18.3	6	7	5
27	613	69	38.5	133	55.0	75	7	17	19.7	3	4	3
1	BD4	69	56.8	133	25.0	75	4	26	-	20	21	7
2	BD4	69	56.8	133	25.0	75	4	27	-	20	21	6
3	CD4	69	36.7	137	58.0	75	5	2	-	75	76	8
7	1D4	69	39.0	133	19.0	75	5	9	-	0	0	1
7	2D4	69	59.0	133	10.0	75	5	9	-	23	21	2
7	3D4	70	22.8	133	24.3	75	5	9	-	30	49	4
7	5D4	70	13.2	132	44.2	75	5	9	-	30	31	4
8	12D4	69	52.3	137	2.6	75	5	10	-	30	35	5

BOTTLE /CTD DATA SET NUMBER:75-0025 YEAR: 1975

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO (M)	DEPTH (M)	
1	G	69	2.0	137	10.0	75	5	0	0.0	4	4	2
1	F	69	5.0	137	44.0	75	5	0	0.0	12	12	2
1	E	69	8.0	137	58.0	75	5	0	0.0	15	16	2
1	D	69	17.0	138	35.0	75	5	0	0.0	7	7	2
1	C	69	22.0	138	45.0	75	5	0	0.0	7	7	2
1	B	69	34.0	138	56.0	75	5	0	0.0	5	5	2
2	104	69	0.0	137	19.0	75	7	16	0.0	3	3	2
2	107	68	58.0	137	5.0	75	7	16	0.0	3	3	2
3	100	69	7.0	137	58.0	75	7	17	0.0	15	20	2
3	100	69	7.0	137	58.0	75	7	17	0.0	13	13	2
3	100	69	7.0	137	58.0	75	7	17	0.0	0	13	1
9	100A	69	9.5	137	55.0	75	7	29	0.0	15	26	2
3	114	69	6.5	137	58.0	75	7	17	0.0	0	0	1
9	114	69	6.5	137	58.0	75	7	17	0.0	3	3	2
8	1	69	15.0	138	31.0	75	7	24	0.0	1	1	2
8	40	69	19.5	138	34.0	75	7	24	0.0	2	2	2
4	26B	69	21.0	138	46.0	75	7	18	0.0	2	2	2
7	25	69	21.0	138	44.0	75	7	23	0.0	12	12	2
7	25	69	21.0	138	44.0	75	7	23	0.0	2	2	2
10	26B	69	21.0	138	46.0	75	8	4	0.0	3	3	2
10	26C	69	21.0	138	47.0	75	8	4	0.0	2	2	2
10	26C	69	21.0	138	47.0	75	8	4	0.0	3	3	2

CON	STN	LAT DEG	LAT MIN	LON DEG	LON MIN	DATE YR	DATE MO	DATE DY	DATE HR	CAST TO (M)	WATER DEPTH (M)	PTS
12	25	69	21.0	138	44.0	75	8	7	0.0	6	6	2
5	45	69	29.0	138	52.0	75	7	20	0.0	0	3	1
5	31	69	34.0	138	54.0	75	7	20	0.0	4	4	2
6	34	69	34.0	138	52.0	75	7	21	0.0	3	3	2
11	31B	69	34.0	138	55.0	75	8	5	0.0	5	5	2

BOTTLE /CTD DATA SET NUMBER:75-0026 YEAR: 1975

CON	STN	LAT DEG	LAT MIN	LON DEG	LON MIN	DATE YR	DATE MO	DATE DY	DATE HR	CAST TO (M)	WATER DEPTH (M)	PTS
1	CC1	70	0.0	125	0.0	75	4	12	18.0	180	0	1
2	CC1	70	0.0	125	0.0	75	4	12	22.0	180	0	1
3	CC1	70	0.0	125	0.0	75	4	13	2.0	180	0	1
4	CC1	70	0.0	125	0.0	75	4	13	6.0	180	0	1
5	CC1	70	0.0	125	0.0	75	4	13	15.0	180	0	1
6	CC1	70	0.0	125	0.0	75	4	13	17.0	180	0	1
7	CC1	70	0.0	125	0.0	75	12	10	1.0	180	0	3
8	CC1	70	0.0	125	0.0	75	12	10	6.0	180	0	3
9	CC1	70	0.0	125	0.0	75	12	10	10.0	180	0	3
10	CC1	70	0.0	125	0.0	75	12	10	13.0	180	0	3
11	CC1	70	0.0	125	0.0	75	12	10	20.0	180	0	3

BOTTLE /CTD DATA SET NUMBER:75-0028 YEAR: 1975

CON	STN	LAT DEG	LAT MIN	LON DEG	LON MIN	DATE YR	DATE MO	DATE DY	DATE HR	CAST TO (M)	WATER DEPTH (M)	PTS
7	BH7	70	0.0	125	0.0	75	6	6	16.2	4	0	1
8	BH7	70	0.0	125	0.0	75	6	7	19.1	5	0	1
10	BH7	70	0.0	125	0.0	75	6	10	20.3	3	0	1
11	BH7	70	0.0	125	0.0	75	6	11	18.5	2	0	1
12	BH7	70	0.0	125	0.0	75	6	13	0.0	2	0	1
1	BH1	70	0.0	125	0.0	75	5	24	0.0	3	0	2
1	BH2	70	0.0	125	0.0	75	5	24	0.0	5	0	7
11	BH2	70	0.0	125	0.0	75	6	11	0.0	5	0	9
13	BH2	70	0.0	125	0.0	75	6	16	0.0	5	0	9
14	BH2	70	0.0	125	0.0	75	6	18	0.0	6	0	10
1	BH3	70	0.0	125	0.0	75	5	24	0.0	7	0	11
13	BH3	70	0.0	125	0.0	75	6	16	0.0	8	0	12

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO (M)	DEPTH (M)	
14	BH3	70	0.0	125	0.0	75	6	18	0.0	7	0	11
15	BH3	70	0.0	125	0.0	75	6	22	0.0	7	0	11
1	BH4	70	0.0	125	0.0	75	5	24	0.0	8	0	14
11	BH4	70	0.0	125	0.0	75	6	11	0.0	8	0	12
13	BH4	70	0.0	125	0.0	75	6	16	0.0	8	0	12
14	BH4	70	0.0	125	0.0	75	6	18	0.0	8	0	12
15	BH4	70	0.0	125	0.0	75	6	22	0.0	8	0	12
1	BH5	70	0.0	125	0.0	75	5	24	0.0	10	0	17
1	BH6	70	0.0	125	0.0	75	5	24	0.0	10	0	17
3	BH6	70	0.0	125	0.0	75	5	27	0.0	10	0	18
4	BH6	70	0.0	125	0.0	75	6	1	0.0	9	0	14
5	BH6	70	0.0	125	0.0	75	6	3	0.0	10	0	20
11	BH6	70	0.0	125	0.0	75	6	11	0.0	10	0	140
13	BH6	70	0.0	125	0.0	75	6	16	0.0	9	0	130
14	BH6	70	0.0	125	0.0	75	6	18	0.0	9	0	130
15	BH6	70	0.0	125	0.0	75	6	22	0.0	10	0	140
1	BH7	70	0.0	125	0.0	75	5	24	0.0	8	0	150
2	BH7	70	0.0	125	0.0	75	5	26	0.0	9	0	150
3	BH7	70	0.0	125	0.0	75	5	27	0.0	8	0	160
4	BH7	70	0.0	125	0.0	75	6	1	0.0	8	0	170
5	BH7	70	0.0	125	0.0	75	6	3	0.0	9	0	190
6	BH7	70	0.0	125	0.0	75	6	5	0.0	9	0	190
7	BH7	70	0.0	125	0.0	75	6	6	0.0	90	0	190
8	BH7	70	0.0	125	0.0	75	6	7	0.0	9	0	130
9	BH7	70	0.0	125	0.0	75	6	9	0.0	8	0	120
10	BH7	70	0.0	125	0.0	75	6	10	0.0	8	0	120
11	BH7A	70	0.0	125	0.0	75	6	11	0.0	9	0	130
13	BH7B	70	0.0	125	0.0	75	6	16	20.8	9	0	130
13	BH7B	70	0.0	125	0.0	75	6	16	23.9	8	0	120
14	BH7B	70	0.0	125	0.0	75	6	18	0.0	9	0	130
15	BH7B	70	0.0	125	0.0	75	6	22	0.0	9	0	130
17	BH7B	70	0.0	125	0.0	75	6	25	0.0	9	0	130
11	BH8	70	0.0	125	0.0	75	6	11	0.0	7	0	100
13	BH8	70	0.0	125	0.0	75	6	16	0.0	7	0	110
14	BH8	70	0.0	125	0.0	75	6	18	0.0	7	0	110
15	BH8	70	0.0	125	0.0	75	6	22	0.0	7	0	110
16	I	70	0.0	125	0.0	75	6	24	0.0	10	0	140
16	II	70	0.0	125	0.0	75	6	24	0.0	18	0	220
17	II	70	0.0	125	0.0	75	6	25	0.0	11	0	150
16	III	70	0.0	125	0.0	75	6	24	0.0	13	0	170
16	IV	70	0.0	125	0.0	75	6	24	0.0	20	0	240
11	FH1	70	0.0	125	0.0	75	6	11	0.0	6	0	100
14	FH1	70	0.0	125	0.0	75	6	18	0.0	6	0	100
15	FH1	70	0.0	125	0.0	75	6	22	0.0	6	0	100
14	FH2	70	0.0	125	0.0	75	6	18	0.0	7	0	110

BOTTLE /CTD DATA SET NUMBER:76-0001 YEAR: 1976

CON	STN	LAT		LON		DATE				CAST TO (M)	WATER DEPTH (M)	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR			
1	1	70	10.6	132	58.9	76	8	9	2.0	30	30	9
2	1	70	10.6	132	58.9	76	8	25	4.0	30	30	9
2	1	70	10.6	132	58.9	76	8	25	4.0	30	30	9
3	1	70	10.6	132	58.9	76	8	26	5.0	30	30	9
4	1	70	10.6	132	58.9	76	8	27	5.0	30	30	9
5	1	70	10.6	132	58.9	76	8	28	4.0	30	30	9
6	1	70	10.6	132	58.9	76	8	29	4.0	30	30	9
7	1	70	10.6	132	58.9	76	8	30	2.0	30	30	9
8	1	70	10.6	132	58.9	76	8	31	2.0	30	30	9
9	1	70	10.6	132	58.9	76	9	1	3.0	30	30	9
11	1	70	10.6	132	58.9	76	9	2	4.0	30	30	9
11	1	70	10.6	132	58.9	76	9	3	2.0	30	30	9
12	1	70	10.6	132	58.9	76	9	4	4.0	30	30	9
13	1	70	10.6	132	58.9	76	9	6	4.0	30	30	9
14	1	70	10.6	132	58.9	76	9	8	3.0	30	30	9
15	1	70	10.6	132	58.9	76	9	9	0.0	30	30	9
16	1	70	10.6	132	58.9	76	9	11	2.5	30	30	9
17	1	70	10.6	132	58.9	76	9	13	6.5	30	30	9
18	1	70	10.6	132	58.9	76	9	14	3.5	30	30	9
19	1	70	10.6	132	58.9	76	9	19	1.6	30	30	9
20	1	70	10.6	132	58.9	76	9	21	2.0	30	30	9
21	1	70	10.6	132	58.9	76	9	23	3.0	30	30	9
22	1	70	10.6	132	58.9	76	9	24	2.0	30	30	9
23	1	70	10.6	132	58.9	76	9	25	3.0	30	30	9
24	1	70	10.6	132	58.9	76	9	28	4.0	30	30	9
25	1	70	10.6	132	58.9	76	10	3	4.5	30	30	9
26	1	70	10.6	132	58.9	76	10	4	5.0	30	30	9
29	1	70	10.6	132	58.9	76	10	5	5.5	30	30	9
30	1	70	10.6	132	58.9	76	10	6	4.0	30	30	9
31	1	70	10.6	132	58.9	76	10	7	5.0	30	30	9
32	1	70	10.6	132	58.9	76	10	10	5.0	30	30	9
33	1	70	10.6	132	58.9	76	10	10	5.7	30	30	9
34	1	70	10.6	132	58.9	76	10	11	3.0	30	30	9
35	1	70	10.6	132	58.9	76	10	12	4.0	30	30	9
36	1	70	10.6	132	58.9	76	10	13	0.0	30	30	9
1	3	70	23.0	135	6.0	76	8	15	3.0	50	59	8
2	3	70	23.0	135	6.0	76	8	16	2.5	50	59	8
3	3	70	23.0	135	6.0	76	8	17	6.0	50	59	8
4	3	70	23.0	135	6.0	76	8	18	6.0	50	59	8
5	3	70	23.0	135	6.0	76	8	19	4.5	50	59	8
6	3	70	23.0	135	6.0	76	8	25	3.0	50	59	8
7	3	70	23.0	135	6.0	76	8	28	2.0	50	59	8
8	3	70	23.0	135	6.0	76	8	30	3.0	50	59	8
9	3	70	23.0	135	6.0	76	9	1	3.0	50	59	8
10	3	70	23.0	135	6.0	76	9	2	.5	50	59	8

CON	STN	LAT		LON		DATE				CAST TO (M)	WATER DEPTH (M)	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR			
11	3	70	23.0	135	6.0	76	9	3	5.5	50	59	8
12	3	70	23.0	135	6.0	76	9	4	2.5	50	59	8
13	3	70	23.0	135	6.0	76	9	7	22.5	50	59	8
14	3	70	23.0	135	6.0	76	9	11	3.5	50	59	8
15	3	70	23.0	135	6.0	76	9	18	2.5	50	59	8
16	3	70	23.0	135	6.0	76	9	21	3.0	50	59	8
17	3	70	23.0	135	6.0	76	9	24	2.0	50	59	8
18	3	70	23.0	135	6.0	76	9	27	2.0	50	59	8
19	3	70	23.0	135	6.0	76	10	3	3.5	50	59	8
20	3	70	23.0	135	6.0	76	10	6	20.0	50	59	8
21	3	70	23.0	135	6.0	76	10	9	23.5	50	59	8

BOTTLE /CTD DATA SET NUMBER:76-0003 YEAR: 1976

CON	STN	LAT		LON		DATE				CAST TO (M)	WATER DEPTH (M)	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR			
1	N15	69	49.3	133	45.1	76	7	29	-	10	10	9
2	N15	69	49.3	133	45.1	76	7	31	-	8	9	8
3	N15	69	49.3	133	45.1	76	8	5	-	9	10	2
4	N15	69	49.3	133	45.1	76	8	5	-	8	10	8
5	N15	69	49.3	133	45.1	76	8	6	-	8	10	2
6	N15	69	49.3	133	45.1	76	8	11	-	8	9	2
7	N15	69	49.3	133	45.1	76	8	20	-	10	10	2
8	N15	69	49.3	133	45.1	76	8	24	-	10	10	11
9	N15	69	49.3	133	45.1	76	9	4	-	9	10	9
10	N10	69	49.0	133	45.1	76	7	28	-	8	9	8
11	N10	69	49.0	133	45.1	76	7	29	-	9	9	9
12	N10	69	49.0	133	45.1	76	8	10	-	9	9	2
13	N10	69	49.0	133	45.1	76	9	4	-	8	9	8
14	N05	69	48.8	133	45.1	76	7	28	-	8	9	8
15	N05	69	48.8	133	45.1	76	7	29	-	8	9	8
16	N05	69	48.8	133	45.1	76	8	24	-	8	9	9
17	N05	69	48.8	133	45.1	76	9	4	-	8	9	8
18	N03	69	48.7	133	45.1	76	9	4	-	8	9	8
19	N02	69	48.7	133	45.1	76	7	28	-	8	9	8
20	N02	69	48.7	133	45.1	76	7	29	-	8	9	8
21	W10	69	48.5	133	46.6	76	7	29	-	9	9	9
22	W10	69	48.5	133	46.6	76	8	10	-	8	8	2
23	W10	69	48.5	133	46.6	76	9	6	-	8	9	8
24	W05	69	48.5	133	45.9	76	7	29	-	8	8	8
25	W05	69	48.5	133	45.9	76	8	22	-	7	8	8
26	W05	69	48.5	133	45.9	76	8	24	-	7	8	8

CON	STN	LAT		LON		DATE				CAST TO (M)	WATER DEPTH (M)	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR			
27	W03	69	48.5	133	45.6	76	9	5	-	9	9	9
28	W02	69	48.5	133	45.5	76	7	29	-	8	8	8
29	S10	69	48.0	133	45.1	76	7	30	-	7	7	8
30	S10	69	48.0	133	45.1	76	8	10	-	7	7	2
31	S10	69	48.0	133	45.1	76	9	4	-	7	8	7
32	S05	69	48.2	133	45.1	76	7	29	-	9	8	9
33	S05	69	48.2	133	45.1	76	8	10	-	7	8	2
34	S05	69	48.2	133	45.1	76	8	24	-	7	8	8
35	S05	69	48.2	133	45.1	76	9	4	-	8	8	8
36	S03	69	48.3	133	45.1	76	9	4	-	8	8	8
37	S25	69	48.4	133	45.1	76	7	29	-	8	8	8
38	S25	69	48.4	133	45.1	76	8	10	-	8	8	2
39	E10	69	48.5	133	43.6	76	8	10	-	9	10	2
40	E10	69	48.5	133	43.6	76	9	5	-	9	9	9
41	E05	69	48.5	133	44.3	76	8	24	-	8	8	9
42	E05	69	48.5	133	44.3	76	9	4	-	9	9	9
43	E03	69	48.5	133	44.6	76	8	5	-	8	9	8
44	E03	69	48.5	133	44.6	76	9	5	-	9	9	9
45	E13	69	48.5	133	44.9	76	8	6	-	8	8	8
46	SW1	69	48.5	133	45.2	76	8	11	-	8	8	2
47	NW5	69	48.6	133	45.6	76	8	27	-	1	8	2
48	SW2	69	48.4	133	45.2	76	8	27	-	0	8	1
49	STN	69	48.5	133	45.1	76	7	31	-	8	8	8
50	E10	69	42.3	132	33.8	76	7	18	-	5	5	6
51	E05	69	42.3	132	34.5	76	7	18	-	6	6	7
52	E03	69	42.3	132	34.8	76	7	18	-	6	6	7
53	BW	69	43.3	132	37.7	76	7	17	-	6	6	4
54	W10	69	42.3	132	36.8	76	7	19	-	7	7	8
55	W05	69	42.3	132	36.1	76	7	19	-	7	7	8
56	W03	69	42.3	132	35.8	76	7	19	-	6	7	7
57	N10	69	42.8	132	35.3	76	7	20	-	6	6	7
58	N05	69	42.6	132	35.3	76	7	20	-	7	7	8
59	N03	69	42.4	132	35.3	76	7	20	-	6	6	7
60	S10	69	41.8	132	35.3	76	7	20	-	5	5	6
61	S05	69	42.0	132	35.3	76	7	20	-	5	5	6
62	S03	69	42.2	132	35.3	76	7	18	93.0	5	5	6
63	NW1	69	42.8	132	36.6	76	7	20	-	6	6	7
64	NW1	69	42.8	132	36.6	76	9	2	-	8	8	8
65	BW	69	43.3	132	37.7	76	9	2	-	6	6	6
66	SW1	69	42.0	132	36.3	76	9	3	-	6	6	6
67	SW0	69	42.1	132	35.7	76	9	3	-	6	6	6
68	SW0	69	42.2	132	35.5	76	9	3	-	6	6	6
69	NE1	69	42.6	132	34.3	76	9	2	-	7	7	7
70	NE0	69	42.5	132	34.9	76	9	2	-	6	6	6
71	NE0	69	42.4	132	35.1	76	9	2	-	6	6	6
72	SE1	69	42.0	132	34.3	76	9	2	-	5	5	5

CON	STN	LAT DEG	LAT MIN	LON DEG	LON MIN	DATE YR	DATE MO	DATE DY	DATE HR	CAST TO (M)	WATER DEPTH (M)	PTS
73	SEO	69	42.1	132	34.9	76	9	2	-	4	4	4
74	SEO	69	42.2	132	35.1	76	9	2	-	5	5	5
75	NW1	69	42.6	132	36.3	76	9	2	-	8	8	8
76	NWO	69	42.5	132	35.7	76	9	2	-	6	6	6
77	NWO	69	42.4	132	35.5	76	9	2	-	6	6	6

BOTTLE /CTD DATA SET NUMBER:76-0004 YEAR: 1976

CON	STN	LAT DEG	LAT MIN	LON DEG	LON MIN	DATE YR	DATE MO	DATE DY	DATE HR	CAST TO (M)	WATER DEPTH (M)	PTS
1	H47	69	56.0	134	25.0	76	8	14	-	12	12	2
2	H47	69	56.0	134	25.0	76	8	15	-	12	12	2
3	E10	69	56.0	134	25.0	76	4	14	-	-	-	-
4	NN	69	59.0	134	23.0	76	8	30	-	-	-	-
5	NNE	69	59.0	134	23.0	76	8	30	-	-	-	-
6	G42	70	0.0	131	12.0	76	8	16	-	11	11	2
7	W15	70	0.0	131	12.0	76	8	16	-	9	9	2
8	MNK	69	43.0	136	28.0	76	9	5	-	-	-	-
9	KDK	69	49.0	136	10.0	76	9	7	-	-	-	-
10	PKQ	69	39.0	136	25.0	76	9	2	-	-	-	-
11	NPK	69	46.0	135	28.0	76	9	1	-	-	-	-
12	-	69	47.0	136	45.0	76	9	3	-	-	-	-
13	IGK	69	44.0	135	13.0	76	9	1	-	-	-	-
14	ERN	69	49.0	133	3.0	76	9	7	-	-	-	-

BOTTLE /CTD DATA SET NUMBER:77-0001 YEAR: 1977

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO (M)	DEPTH (M)	
1	1	68	42.9	135	26.3	77	7	4	-	1	1	2
2	2	68	51.2	135	42.5	77	7	4	-	4	4	2
3	3	68	56.1	136	17.9	77	7	4	-	2	2	2
5	5	68	56.6	137	1.0	77	7	4	-	2	2	2
6	6	69	4.5	136	19.0	77	7	4	-	2	2	2
7	7	69	4.2	136	39.2	77	7	4	-	1	1	2
9	9	69	2.9	137	28.3	77	7	4	-	7	7	2
10	10	69	12.0	136	7.5	77	7	4	-	1	1	2
11	11	69	11.7	136	40.2	77	7	4	-	2	2	2
12	12	69	11.4	137	2.8	77	7	4	-	4	4	2
13	13	69	11.0	137	30.0	77	7	4	-	18	18	2
14	14	69	20.7	135	53.1	77	7	4	-	1	1	2
16	16	69	20.1	136	41.5	77	7	4	-	3	3	2
17	17	69	19.0	137	2.2	77	7	4	-	7	7	2
18	18	69	17.9	137	31.3	77	7	4	-	34	34	2
22	22	69	26.6	137	5.0	77	7	4	-	16	16	2
23	23	69	26.0	137	32.5	77	7	4	-	44	44	2
27	1	68	42.9	135	26.3	77	7	19	-	0	1	1
28	2	68	51.2	135	42.5	77	7	19	-	4	4	2
29	3	68	56.1	136	17.9	77	7	19	-	0	2	1
30	4	68	55.7	136	38.8	77	7	19	-	0	2	1
31	5	68	56.6	137	1.0	77	7	19	-	0	2	1
32	6	69	4.5	136	19.0	77	7	19	-	0	2	1
33	7	69	4.2	136	39.2	77	7	19	-	0	1	1
34	8	69	4.0	136	1.1	77	7	19	-	0	2	1
35	9	69	2.9	137	28.3	77	7	19	-	0	7	1
36	10	69	12.0	136	7.5	77	7	19	-	0	1	1
37	11	69	11.7	136	40.2	77	7	19	-	0	2	1
38	12	69	11.4	137	2.8	77	7	19	-	0	4	1
39	13	69	11.0	137	30.0	77	7	19	-	0	18	1
40	14	69	20.7	135	53.1	77	7	19	-	0	1	1
41	15	69	20.5	136	10.0	77	7	19	-	0	1	1
42	16	69	20.1	136	41.5	77	7	19	-	0	3	1
43	17	69	19.0	137	2.2	77	7	19	-	0	7	1
44	18	69	17.9	137	31.3	77	7	19	-	34	34	2
45	19	69	27.3	135	47.1	77	7	19	-	0	2	1
46	20	69	26.9	136	12.2	77	7	19	-	0	3	1
47	21	69	26.8	136	42.0	77	7	19	-	0	6	1
48	22	69	26.6	137	5.0	77	7	19	-	0	16	1
49	23	69	26.0	137	32.5	77	7	19	-	44	44	2
50	24	69	33.2	137	33.4	77	7	19	-	11	11	2
51	25	69	33.6	136	42.0	77	7	19	-	52	52	2
52	26	69	32.6	135	40.8	77	7	19	-	0	1	1
53	1	68	42.9	135	25.3	77	7	25	-	1	1	2
54	2	68	51.2	135	42.5	77	7	25	-	4	4	2

CON	STN	LAT		LON		DATE				CAST TO (M)	WATER DEPTH (M)	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR			
55	3	68	56.1	136	17.9	77	7	25	-	2	2	2
56	4	68	55.7	136	38.8	77	7	25	-	0	2	1
57	5	68	56.6	137	1.0	77	7	25	-	0	2	1
58	6	69	4.5	136	19.0	77	7	25	-	0	2	1
59	7	69	4.2	136	39.2	77	7	25	-	0	1	1
60	8	69	4.0	136	1.1	77	7	25	-	0	2	1
61	9	69	2.9	137	28.3	77	7	25	-	7	7	2
62	10	69	12.0	136	7.5	77	7	25	-	1	1	2
63	11	69	11.7	136	40.2	77	7	25	-	0	2	1
64	12	69	11.4	137	2.8	77	7	25	-	0	4	1
65	13	69	11.0	137	30.0	77	7	25	-	0	18	1
66	14	69	20.7	135	53.1	77	7	25	-	1	1	2
67	15	69	20.5	136	10.0	77	7	25	-	1	1	2
68	16	69	20.1	136	41.5	77	7	25	-	0	3	1
69	17	69	19.0	137	2.2	77	7	25	-	7	7	2
70	18	69	17.9	137	31.3	77	7	25	-	34	34	2
71	19	69	27.3	135	47.1	77	7	25	-	2	2	2
72	20	69	26.9	136	12.2	77	7	25	-	3	3	2
73	21	69	26.8	136	42.0	77	7	25	-	6	6	2
74	22	69	26.6	137	5.0	77	7	25	-	16	16	2
75	23	69	26.0	137	32.5	77	7	25	-	44	44	2
76	24	69	33.2	137	33.4	77	7	25	-	0	11	1
77	25	69	33.6	136	42.0	77	7	25	-	52	52	2
78	26	69	32.6	135	40.8	77	7	25	-	1	1	2
79	1	68	42.9	135	25.3	77	8	4	-	4	1	2
80	2	68	51.2	135	42.5	77	8	4	-	4	4	2
81	3	68	56.1	136	17.9	77	8	4	-	2	2	2
82	4	68	55.7	136	38.8	77	8	4	-	0	2	1
83	5	68	56.6	137	1.0	77	8	4	-	0	2	1
84	6	69	4.5	136	19.0	77	8	4	-	0	2	1
85	7	69	4.2	136	39.2	77	8	4	-	0	1	1
86	8	69	4.0	136	1.1	77	8	4	-	0	2	1
87	9	69	2.9	137	28.3	77	8	4	-	0	7	1
88	10	69	12.0	136	7.5	77	8	4	-	0	1	1
89	11	69	11.7	136	40.2	77	8	4	-	0	2	1
90	12	69	11.4	137	2.8	77	8	4	-	0	4	1
91	13	69	11.0	137	30.0	77	8	4	-	0	18	1
92	14	69	20.7	135	53.1	77	8	4	-	0	1	1
93	15	69	20.5	136	10.0	77	8	4	-	0	1	1
94	16	69	20.1	136	41.5	77	8	4	-	0	3	1
93	17	69	19.0	137	2.2	77	8	4	-	0	7	1
96	18	69	17.9	137	31.3	77	8	4	-	0	34	1
97	19	69	27.3	135	47.1	77	8	4	-	0	2	1
98	20	69	26.9	136	12.2	77	8	4	-	0	3	1
99	21	69	26.8	136	42.0	77	8	4	-	0	6	1
100	22	69	26.6	137	5.0	77	8	4	-	0	16	1

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO (M)	DEPTH (M)	
101	23	69	26.0	137	32.5	77	8	4	-	0	44	1
103	25	69	33.6	136	42.0	77	8	4	-	0	52	1
104	26	69	32.6	135	40.8	77	8	4	-	0	1	1
105	1	68	42.9	135	25.3	77	8	11	-	0	1	1
106	2	68	51.2	135	42.5	77	8	11	-	0	4	1
107	3	68	56.1	136	17.9	77	8	11	-	0	2	1
108	4	68	55.7	136	38.8	77	8	11	-	0	2	1
109	5	68	56.6	137	1.0	77	8	11	-	0	2	1
110	6	69	4.5	136	19.0	77	8	11	-	0	2	1
111	7	69	4.2	136	39.2	77	8	11	-	0	1	1
112	8	69	4.0	136	1.1	77	8	11	-	0	2	1
113	9	69	2.9	137	28.3	77	8	11	-	0	7	1
114	10	69	12.0	136	7.5	77	8	11	-	0	1	1
115	11	69	11.7	136	40.2	77	8	11	-	0	2	1
116	12	69	11.4	137	2.8	77	8	11	-	0	4	1
117	13	69	11.0	137	30.0	77	8	11	-	0	18	1
118	14	69	20.7	135	53.1	77	8	11	-	0	1	1
119	15	69	20.5	136	10.0	77	8	11	-	0	1	1
120	16	69	20.1	136	41.5	77	8	11	-	0	3	1
121	17	69	19.0	137	2.2	77	8	11	-	0	7	1
122	18	69	17.9	137	31.3	77	8	11	-	0	34	1

BOTTLE /CTD DATA SET NUMBER:77-0002 YEAR: 1977

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO (M)	DEPTH (M)	
1	1	69	44.3	132	30.6	77	7	23	-	0	-	1
2	2	69	42.0	132	16.2	77	7	22	-	0	-	1
3	3	69	44.5	132	21.1	77	7	21	-	0	-	1
4	4	69	46.3	132	14.0	77	7	21	-	0	-	1
5	5	69	43.3	132	36.5	77	7	17	-	0	-	1
6	6	69	43.2	132	33.7	77	7	16	-	0	-	1
7	7	69	43.1	132	38.2	77	7	17	-	0	-	1
8	8	69	42.1	132	34.8	77	7	16	-	0	-	1
9	9	69	39.0	132	40.5	77	7	18	-	0	-	1
10	10	69	38.9	132	37.4	77	7	18	-	0	-	1
11	11	69	40.0	132	28.4	77	7	19	-	0	-	1
12	12	69	39.2	132	27.6	77	7	19	-	0	-	1
13	1	69	44.3	132	30.6	77	8	30	-	0	-	1
14	2	69	42.0	132	16.2	77	8	30	-	0	-	1
15	3	69	44.5	132	21.1	77	8	30	-	0	-	1
16	4	69	46.3	132	14.0	77	8	30	-	0	-	1

CON	STN	LAT		LON		DATE				CAST TO (M)	WATER DEPTH (M)	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR			
17	5	69	43.3	132	36.5	77	8	27	-	0	-	1
18	6	69	43.2	132	33.7	77	8	28	-	0	-	1
19	7	69	43.1	132	38.2	77	8	27	-	0	-	1
20	8	69	42.1	132	34.8	77	8	28	-	0	-	1
21	9	69	39.0	132	40.5	77	8	31	-	0	-	1
22	10	69	38.9	132	37.4	77	8	31	-	0	-	1
23	11	69	40.0	132	28.4	77	9	2	-	0	-	1
24	12	69	39.2	132	27.6	77	9	2	-	0	-	1

BOTTLE /CTD DATA SET NUMBER:77-0003 YEAR: 1977

CON	STN	LAT		LON		DATE				CAST TO (M)	WATER DEPTH (M)	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR			
4	14	71	14.1	124	32.5	77	8	11	15.0	300	330	11
3	15	71	2.7	124	44.8	77	8	11	10.9	330	345	12
2	16	70	48.4	125	2.6	77	8	11	6.6	300	310	11
1	17	70	35.5	125	15.9	77	8	11	2.5	240	250	11
5	19	70	16.5	126	59.7	77	8	14	8.7	100	120	8
6	20	70	36.5	126	37.4	77	8	14	12.6	300	346	11
7	21	70	55.3	126	27.5	77	8	14	16.6	320	343	12
8	22	71	17.2	126	25.7	77	8	14	22.0	450	460	13
9	23	71	37.4	126	28.9	77	8	15	2.3	450	470	13
10	24	70	36.0	121	46.9	77	8	21	13.9	500	538	13
11	25	70	12.4	121	19.1	77	8	21	19.5	370	398	14
12	26	69	59.5	121	9.2	77	8	21	23.2	350	370	12
13	27	70	34.3	119	19.0	77	8	29	16.9	320	337	12
14	28	71	1.7	119	12.0	77	8	29	22.2	150	168	9
15	29	71	22.4	119	4.3	77	8	30	2.0	100	120	8
16	30	70	34.5	120	26.0	77	9	6	17.5	300	321	11
17	31	70	49.1	120	34.2	77	9	6	20.9	250	270	11
18	32	71	1.8	120	40.6	77	9	6	23.7	170	188	10

BOTTLE /CTD DATA SET NUMBER:77-0004 YEAR: 1977

CON	STN	LAT		LON		DATE				CAST TO (M)	WATER DEPTH (M)	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR			
156	6	69	45.4	139	44.6	77	10	6	-	30	34	10
157	6	69	45.4	139	44.6	77	10	6	-	30	34	10
158	6	69	45.4	139	44.6	77	10	8	-	30	34	10
159	6	69	45.4	139	44.6	77	10	9	-	20	34	9
160	6	69	45.4	139	44.6	77	10	10	-	30	34	10
161	6	69	45.4	139	44.6	77	10	11	-	30	34	10
162	6	69	45.4	139	44.6	77	10	12	-	30	34	10
163	6	69	45.4	139	44.6	77	10	13	-	30	34	10
164	6	69	45.4	139	44.6	77	10	14	-	30	34	10
165	6	69	45.4	139	44.6	77	10	15	-	30	34	10
166	6	69	45.4	139	44.6	77	10	17	-	0	34	0
167	6	69	45.4	139	44.6	77	10	18	-	30	34	10
1	3	70	9.1	132	44.1	77	7	21	-	30	29	9
2	3	70	9.1	132	44.1	77	7	22	-	30	29	9
3	3	70	9.1	132	44.1	77	7	23	-	30	29	9
4	3	70	9.1	132	44.1	77	7	24	-	30	29	9
5	3	70	9.1	132	44.1	77	7	25	-	30	29	9
6	3	70	9.1	132	44.1	77	7	26	-	30	29	9
7	3	70	9.1	132	44.1	77	7	27	-	30	29	9
8	3	70	9.1	132	44.1	77	7	28	-	30	29	9
9	3	70	9.1	132	44.1	77	7	14	-	20	29	8
10	3	70	9.1	132	44.1	77	7	30	-	30	29	9
11	3	70	9.1	132	44.1	77	7	31	-	30	29	9
12	3	70	9.1	132	44.1	77	8	1	-	30	29	9
13	3	70	9.1	132	44.1	77	8	2	-	30	29	9
14	3	70	9.1	132	44.1	77	8	3	-	30	29	9
15	3	70	9.1	132	44.1	77	8	6	-	30	29	9
16	3	70	9.1	132	44.1	77	8	7	-	30	29	9
17	3	70	9.1	132	44.1	77	8	8	-	30	29	9
18	3	70	9.1	132	44.1	77	8	9	-	30	29	9
19	3	70	9.1	132	44.1	77	8	10	-	30	29	8
20	3	70	9.1	132	44.1	77	8	11	-	30	29	9
21	3	70	9.1	132	44.1	77	8	12	-	30	29	9
22	3	70	9.1	132	44.1	77	8	13	-	30	29	9
23	3	70	9.1	132	44.1	77	8	14	-	30	29	9
24	3	70	9.1	132	44.1	77	8	15	-	30	29	9
25	3	70	9.1	132	44.1	77	8	16	-	30	29	9
26	3	70	9.1	132	44.1	77	8	17	-	30	29	9
27	3	70	9.1	132	44.1	77	8	18	-	30	29	9
28	3	70	9.1	132	44.1	77	8	19	-	30	29	9
29	3	70	9.1	132	44.1	77	8	20	-	30	29	9
30	3	70	9.1	132	44.1	77	8	21	-	30	29	9
31	3	70	9.1	132	44.1	77	8	22	-	30	29	9
32	3	70	9.1	132	44.1	77	8	23	-	30	29	9
33	3	70	9.1	132	44.1	77	8	24	-	30	29	9

CON	STN	LAT		LON		DATE				CAST TO (M)	WATER DEPTH (M)	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR			
34	3	70	9.1	132	44.1	77	8	25	-	30	29	9
35	3	70	9.1	132	44.1	77	8	26	-	30	29	9
36	3	70	9.1	132	44.1	77	8	27	-	30	29	9
37	3	70	9.1	132	44.1	77	8	28	-	30	29	9
38	3	70	9.1	132	44.1	77	8	29	-	30	29	9
39	3	70	9.1	132	44.1	77	8	30	-	30	29	9
40	3	70	9.1	132	44.1	77	8	31	-	30	29	8
41	3	70	9.1	132	44.1	77	9	1	-	30	29	9
42	3	70	9.1	132	44.1	77	9	2	-	30	29	9
43	3	70	9.1	132	44.1	77	9	3	-	30	29	9
44	3	70	9.1	132	44.1	77	9	4	-	30	29	9
45	3	70	9.1	132	44.1	77	9	5	-	30	29	9
46	3	70	9.1	132	44.1	77	9	6	-	30	29	9
47	3	70	9.1	132	44.1	77	9	7	-	30	29	8
48	3	70	9.1	132	44.1	77	9	8	-	30	29	9
49	3	70	9.1	132	44.1	77	9	9	-	30	29	9
50	3	70	9.1	132	44.1	77	9	10	-	30	29	9
51	3	70	9.1	132	44.1	77	9	19	-	20	29	7
52	3	70	9.1	132	44.1	77	9	20	-	20	29	8
53	3	70	9.1	132	44.1	77	9	21	-	0	29	0
54	3	70	9.1	132	44.1	77	9	22	-	20	29	8
55	3	70	9.1	132	44.1	77	9	22	-	20	29	8
56	3	70	9.1	132	44.1	77	9	23	-	20	29	8
57	3	70	9.1	132	44.1	77	9	25	-	20	29	8
58	3	70	9.1	132	44.1	77	9	28	-	30	29	9
59	3	70	9.1	132	44.1	77	9	29	-	30	29	8
60	3	70	9.1	132	44.1	77	10	22	-	30	29	6
61	102	70	22.9	135	5.6	77	7	26	-	50	57	12
62	102	70	22.9	135	5.6	77	7	27	-	50	57	12
63	102	70	22.9	135	5.6	77	7	28	-	50	57	12
64	102	70	22.9	135	5.6	77	7	29	-	50	57	12
65	102	70	22.9	135	5.6	77	7	30	-	50	57	12
66	102	70	22.9	135	5.6	77	7	31	-	50	57	12
67	102	70	22.9	135	5.6	77	8	1	-	50	57	12
68	102	70	22.9	135	5.6	77	8	2	-	50	57	12
69	102	70	22.9	135	5.6	77	8	3	-	50	57	12
70	102	70	22.9	135	5.6	77	8	4	-	0	57	0
71	102	70	22.9	135	5.6	77	8	5	-	0	57	0
72	102	70	22.9	135	5.6	77	8	6	-	50	57	11
73	102	70	22.9	135	5.6	77	8	7	-	50	57	11
74	102	70	22.9	135	5.6	77	8	8	-	50	57	12
75	102	70	22.9	135	5.6	77	8	9	-	50	57	12
76	102	70	22.9	135	5.6	77	8	10	-	50	57	12
77	102	70	22.9	135	5.6	77	8	11	-	50	57	12
78	102	70	22.9	135	5.6	77	8	12	-	50	57	11
79	102	70	22.9	135	5.6	77	8	13	-	50	57	12

CON	STN	LAT DEG	LAT MIN	LON DEG	LON MIN	DATE YR	DATE MO	DATE DY	DATE HR	CAST TO (M)	WATER DEPTH (M)	PTS
80	102	70	22.9	135	5.6	77	8	14	-	50	57	12
81	102	70	22.9	135	5.6	77	8	15	-	50	57	12
82	102	70	22.9	135	5.6	77	8	15	-	50	57	12
83	102	70	22.9	135	5.6	77	8	16	-	50	57	12
84	102	70	22.9	135	5.6	77	8	17	-	50	57	12
85	102	70	22.9	135	5.6	77	8	18	-	50	57	12
86	102	70	22.9	135	5.6	77	8	19	-	50	57	12
87	102	70	22.9	135	5.6	77	8	20	-	50	57	12
88	102	70	22.9	135	5.6	77	8	21	-	50	57	12
89	102	70	22.9	135	5.6	77	8	22	-	50	57	12
90	102	70	22.9	135	5.6	77	8	23	-	50	57	12
91	102	70	22.9	135	5.6	77	8	24	-	50	57	12
92	102	70	22.9	135	5.6	77	8	25	-	50	57	10
93	102	70	22.9	135	5.6	77	8	26	-	0	57	0
94	102	70	22.9	135	5.6	77	8	27	-	40	57	11
93	102	70	22.9	135	5.6	77	8	25	-	50	57	12
96	102	70	22.9	135	5.6	77	8	29	-	50	57	11
97	102	70	22.9	135	5.6	77	8	30	-	50	57	12
98	102	70	22.9	135	5.6	77	8	31	-	50	57	12
99	102	70	22.9	135	5.6	77	9	1	-	50	57	12
100	3	70	9.1	132	44.1	77	9	2	-	50	29	12
101	102	70	22.9	135	5.6	77	9	3	-	50	57	12
102	102	70	22.9	135	5.6	77	9	4	-	50	57	11
103	102	70	22.9	135	5.6	77	9	5	-	50	57	12
104	102	70	22.9	135	5.6	77	9	6	-	50	57	12
105	102	70	22.9	135	5.6	77	9	7	-	50	57	11
106	102	70	22.9	135	5.6	77	9	8	-	40	57	10
107	102	70	22.9	135	5.6	77	9	9	-	50	57	12
108	102	70	22.9	135	5.6	77	9	10	-	50	57	12
109	102	70	22.9	135	5.6	77	9	11	-	50	57	12
110	102	70	22.9	135	5.6	77	9	12	-	50	57	12
111	102	70	22.9	135	5.6	77	9	13	-	50	57	12
112	102	70	22.9	135	5.6	77	9	14	-	50	57	12
113	102	70	22.9	135	5.6	77	9	15	-	50	57	12
114	102	70	22.9	135	5.6	77	9	16	-	50	57	12
115	102	70	22.9	135	5.6	77	9	17	-	50	57	12
116	102	70	22.9	135	5.6	77	9	18	-	50	57	12
117	102	70	22.9	135	5.6	77	9	19	-	50	57	12
118	102	70	22.9	135	5.6	77	9	20	-	50	57	12
120	102	70	22.9	135	5.6	77	9	22	-	50	57	12
121	102	70	22.9	135	5.6	77	9	23	-	50	57	12
122	102	70	22.9	135	5.6	77	9	24	-	50	57	12
123	102	70	22.9	135	5.6	77	9	25	-	50	57	12
124	102	70	22.9	135	5.6	77	9	26	-	50	57	11
125	102	70	22.9	135	5.6	77	9	27	-	50	57	12
126	102	70	22.9	135	5.6	77	9	28	-	50	57	12

CON	STN	LAT DEG	MIN	LON DEG	MIN	DATE YR	MO	DY	HR	CAST TO (M)	WATER DEPTH (M)	PTS
127	102	70	22.9	135	5.6	77	9	29	-	50	57	12
128	102	70	22.9	135	5.6	77	10	1	-	50	57	12
140	107	70	33.9	130	50.6	77	7	10	-	6	29	4
141	107	70	33.9	130	50.6	77	7	14	-	20	29	8
142	107	70	33.9	130	50.6	77	7	16	-	20	29	8
143	107	70	33.9	130	50.6	77	7	17	-	20	29	8
144	107	70	33.9	130	50.6	77	7	18	-	20	29	8
145	107	70	33.9	130	50.6	77	7	19	-	20	29	9
146	107	70	33.9	130	50.6	77	7	20	-	20	29	8
147	107	70	33.9	130	50.6	77	7	21	-	20	29	8
148	107	70	33.9	130	50.6	77	7	22	-	15	29	7
149	107	70	33.9	130	50.6	77	7	23	-	20	29	8
150	107	70	33.9	130	50.6	77	7	24	-	20	29	8
151	107	70	33.9	130	50.6	77	7	25	-	20	29	8
152	107	70	33.9	130	50.6	77	7	26	-	20	29	8
153	107	70	33.9	130	50.6	77	7	27	-	20	29	9
154	107	70	33.9	130	50.6	77	7	28	-	20	29	8
168	8	70	28.6	136	16.9	77	7	30	-	60	63	8
169	8	70	28.6	136	16.9	77	7	31	-	40	63	10
170	8	70	28.6	136	16.9	77	8	1	-	60	63	12
171	8	70	28.6	136	16.9	77	8	2	-	60	63	12
172	8	70	28.6	136	16.9	77	8	3	-	60	63	12
173	8	70	28.6	136	16.9	77	8	4	-	60	63	12
174	8	70	28.6	136	16.9	77	8	5	-	50	63	11
175	8	70	28.6	136	16.9	77	8	6	-	60	63	12
176	8	70	28.6	136	16.9	77	8	7	-	60	63	12
177	8	70	28.6	136	16.9	77	8	8	-	60	63	12
178	8	70	28.6	136	16.9	77	8	9	-	60	63	12
179	8	70	28.6	136	16.9	77	8	10	-	60	63	12
180	8	70	28.6	136	16.9	77	8	11	-	60	63	12
181	8	70	28.6	136	16.9	77	8	12	-	60	63	12
182	8	70	28.6	136	16.9	77	8	13	-	60	63	12
183	8	70	28.6	136	16.9	77	8	14	-	60	63	12
184	8	70	28.6	136	16.9	77	8	15	-	50	63	11
185	8	70	28.6	136	16.9	77	8	16	-	60	63	12
186	8	70	28.6	136	16.9	77	8	17	-	50	63	11
187	8	70	28.6	136	16.9	77	8	18	-	50	63	11
188	8	70	28.6	136	16.9	77	8	19	-	60	63	12
189	8	70	28.6	136	16.9	77	8	20	-	60	63	12
190	8	70	28.6	136	16.9	77	8	21	-	60	63	12
191	8	70	28.6	136	16.9	77	8	22	-	60	63	12
192	8	70	28.6	136	16.9	77	8	23	-	60	63	12
193	8	70	28.6	136	16.9	77	8	24	-	60	63	12
194	8	70	28.6	136	16.9	77	8	25	-	60	63	12
195	8	70	28.6	136	16.9	77	8	26	-	60	63	11
196	8	70	28.6	136	16.9	77	8	27	-	60	63	12

CON	STN	LAT		LON		DATE				CAST TO (M)	WATER DEPTH (M)	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR			
197	8	70	28.6	136	16.9	77	8	28	-	60	63	12
198	8	70	28.6	136	16.9	77	8	29	-	60	63	12
199	8	70	28.6	136	16.9	77	8	30	-	60	63	12
200	8	70	28.6	136	16.9	77	8	31	-	60	63	12
201	8	70	28.6	136	16.9	77	9	1	-	60	63	12
202	8	70	28.6	136	16.9	77	9	2	-	60	63	12
203	8	70	28.6	136	16.9	77	9	3	-	60	63	12
204	8	70	28.6	136	16.9	77	9	4	-	60	63	12
205	8	70	28.6	136	16.9	77	9	5	-	60	63	12
206	8	70	28.6	136	16.9	77	9	6	-	60	63	12
207	8	70	28.6	136	16.9	77	9	7	-	60	63	12
208	8	70	28.6	136	16.9	77	9	8	-	60	63	12
209	8	70	28.6	136	16.9	77	9	9	-	60	63	12
210	8	70	28.6	136	16.9	77	9	10	-	60	63	12
211	8	70	28.6	136	16.9	77	9	11	-	60	63	12
212	8	70	28.6	136	16.9	77	9	12	-	60	63	12
213	8	70	28.6	136	16.9	77	9	13	-	60	63	12
214	8	70	28.6	136	16.9	77	9	14	-	60	63	12
215	8	70	28.6	136	16.9	77	9	15	-	60	63	12
216	8	70	28.6	136	16.9	77	9	16	-	0	63	0
217	8	70	28.6	136	16.9	77	9	17	-	60	63	12
218	8	70	28.6	136	16.9	77	9	18	-	60	63	12
219	8	70	28.6	136	16.9	77	9	19	-	60	63	11
220	8	70	28.6	136	16.9	77	9	20	-	60	63	12
221	8	70	28.6	136	16.9	77	9	21	-	60	63	12
222	8	70	28.6	136	16.9	77	9	22	-	60	63	12
223	8	70	28.6	136	16.9	77	9	23	-	60	63	12
224	8	70	28.6	136	16.9	77	9	24	-	60	63	12
225	8	70	28.6	136	16.9	77	9	25	-	60	63	12
226	8	70	28.6	136	16.9	77	9	26	-	60	63	12
227	8	70	28.6	136	16.9	77	9	27	-	60	63	12
228	8	70	28.6	136	16.9	77	9	28	-	60	63	12
229	8	70	28.6	136	16.9	77	9	29	-	60	63	12
230	8	70	28.6	136	16.9	77	9	30	-	60	63	12
231	8	70	28.6	136	16.9	77	10	1	-	60	63	12
232	8	70	28.6	136	16.9	77	10	2	-	60	63	12
233	8	70	28.6	136	16.9	77	10	3	-	60	63	12
234	8	70	28.6	136	16.9	77	10	4	-	60	63	12
235	8	70	28.6	136	16.9	77	10	5	-	60	63	12
236	8	70	28.6	136	16.9	77	10	6	-	60	63	12
237	8	70	28.6	136	16.9	77	10	7	-	60	63	12
238	8	70	28.6	136	16.9	77	10	8	-	60	63	12
239	8	70	28.6	136	16.9	77	10	9	-	60	63	12
240	8	70	28.6	136	16.9	77	10	10	-	60	63	12
241	8	70	28.6	136	16.9	77	10	11	-	60	63	12
242	8	70	28.6	136	16.9	77	10	12	-	50	63	10

CON	STN	LAT DEG	 MIN	LON DEG	 MIN	DATE YR	 MO	 DY	 HR	CAST TO (M)	WATER DEPTH (M)	PTS
243	8	70	28.6	136	16.9	77	10	13	-	60	63	12
240	8	70	28.6	136	16.9	77	10	10	-	60	63	12
241	8	70	28.6	136	16.9	77	10	11	-	60	63	12
242	8	70	28.6	136	16.9	77	10	12	-	50	63	10
243	8	70	28.6	136	16.9	77	10	13	-	60	63	12
240	8	70	28.6	136	16.9	77	10	10	-	60	63	12
241	8	70	28.6	136	16.9	77	10	11	-	60	63	12
242	8	70	28.6	136	16.9	77	10	12	-	50	63	10
243	8	70	28.6	136	16.9	77	10	13	-	60	63	12
240	8	70	28.6	136	16.9	77	10	10	-	60	63	12
241	8	70	28.6	136	16.9	77	10	11	-	60	63	12
242	8	70	28.6	136	16.9	77	10	12	-	50	63	10
243	8	70	28.6	136	16.9	77	10	13	-	60	63	12
240	8	70	28.6	136	16.9	77	10	10	-	60	63	12
241	8	70	28.6	136	16.9	77	10	11	-	60	63	12
242	8	70	28.6	136	16.9	77	10	12	-	50	63	10
243	8	70	28.6	136	16.9	77	10	13	-	60	63	12
240	8	70	28.6	136	16.9	77	10	10	-	60	63	12
241	8	70	28.6	136	16.9	77	10	11	-	60	63	12
242	8	70	28.6	136	16.9	77	10	12	-	50	63	10
243	8	70	28.6	136	16.9	77	10	13	-	60	63	12
244	8	70	28.6	136	16.9	77	10	14	-	60	63	12
245	8	70	28.6	136	16.9	77	10	15	-	60	63	12
246	8	70	28.6	136	16.9	77	10	16	-	60	63	12
247	8	70	28.6	136	16.9	77	10	16	-	60	63	12
131	105	70	27.8	133	29.7	77	10	11	-	40	52	10
133	105	70	27.8	133	29.7	77	10	13	-	50	52	11
132	105	70	27.8	133	29.7	77	10	12	-	50	52	11
134	105	70	27.8	133	29.7	77	10	14	-	50	52	11
135	105	70	27.8	133	29.7	77	10	15	-	50	52	11
136	105	70	27.8	133	29.7	77	10	16	-	50	52	11
137	105	70	27.8	133	29.7	77	10	17	-	50	52	11
138	105	70	27.8	133	29.7	77	10	17	-	50	52	11
139	105	70	27.8	133	29.7	77	10	18	-	30	52	9
129	105	70	27.8	133	29.7	77	9	20	-	30	52	9
130	105	70	27.8	133	29.7	77	9	24	-	20	52	8
37	12	70	34.1	130	19.3	77	7	11	-	15	29	8

BOTTLE /CTD DATA SET NUMBER:77-0009 YEAR: 1977

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO (M)	DEPTH (M)	
6	0221	69	56.6	134	21.2	77	7	28	14.5	12	12	12
15	0222	69	56.6	134	21.1	77	7	31	8.5	12	13	12
4	0223	69	57.4	134	20.2	77	7	27	21.0	12	12	12
16	0224	70	.4	134	16.7	77	7	31	12.0	14	16	14
5	1121	69	56.3	134	21.0	77	7	28	12.0	12	12	12
3	1122	69	56.3	134	20.7	77	7	27	19.0	12	12	12
1	1123	69	56.0	134	18.5	77	7	26	17.5	12	13	12
2	1124	69	54.8	134	9.7	77	7	27	15.5	12	12	12
17	2021	69	56.3	134	21.6	77	7	31	13.3	12	12	12
11	2022	69	56.2	134	21.7	77	7	30	13.2	12	12	12
7	2023	69	55.4	134	22.6	77	7	28	18.5	12	12	12
10	2024	69	52.4	134	26.1	77	7	30	10.5	10	10	10
14	2921	69	56.5	134	21.8	77	7	30	23.0	12	13	12
13	2922	69	56.5	134	22.1	77	7	30	21.5	12	12	12
9	2923	69	56.8	134	24.3	77	7	29	14.0	12	13	12
8	2923	69	56.8	134	24.3	77	7	28	-	12	13	12
12	2924	69	58.0	134	33.1	77	7	30	15.0	13	14	13
20	0221	69	56.6	134	21.2	77	8	25	17.0	12	12	12
27	0222	69	56.6	134	21.1	77	8	29	8.5	12	13	12
29	0223	69	57.4	134	20.2	77	8	29	15.5	12	12	12
31	0224	70	.4	134	16.7	77	8	29	16.2	14	16	14
30	1121	69	56.3	134	21.0	77	8	29	16.0	12	12	12
26	1122	69	56.3	134	20.7	77	8	29	7.5	12	12	12
21	1123	69	56.0	134	18.5	77	8	26	10.0	12	13	12
28	1124	69	54.8	134	9.7	77	8	29	14.0	12	12	12
18	2021	69	56.3	134	21.6	77	8	25	14.5	12	12	12
33	2022	69	56.2	134	21.7	77	8	29	21.5	12	12	12
32	2023	69	55.4	134	22.6	77	8	29	19.0	12	12	12
24	2024	69	52.4	134	26.1	77	8	26	16.5	10	10	10
23	2922	69	56.5	134	22.1	77	8	26	15.0	12	12	12
22	2923	69	56.8	134	24.3	77	8	26	11.0	12	13	12
25	2924	69	58.0	134	33.1	77	8	28	21.0	13	14	13

BOTTLE /CTD DATA SET NUMBER:78-0001 YEAR: 1978

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO (M)	DEPTH (M)	
93	8	70	28.6	136	16.9	78	8	11	-	50	63	12
96	8	70	28.6	136	16.9	78	8	11	-	50	63	12
42	4	70	9.1	132	43.8	78	7	18	-	30	29	10
43	4	70	9.1	132	43.8	78	7	22	-	30	29	10
44	4	70	9.1	132	43.8	78	7	20	-	30	29	10
45	4	70	9.1	132	43.8	78	7	26	-	30	29	10
46	4	70	9.1	132	43.8	78	7	27	-	30	29	10
47	4	70	9.1	132	43.8	78	7	27	-	30	29	10
48	4	70	9.1	132	43.8	78	7	30	-	30	29	10
49	4	70	9.1	132	43.8	78	7	31	-	30	29	10
50	4	70	9.1	132	43.8	78	8	1	-	30	29	10
51	4	70	9.1	132	43.8	78	8	3	-	30	29	10
52	4	70	9.1	132	43.8	78	8	5	-	30	29	10
53	4	70	9.1	132	43.8	78	8	10	-	30	29	9
54	4	70	9.1	132	43.8	78	8	15	-	30	29	10
55	4	70	9.1	132	43.8	78	8	17	-	30	29	10
56	4	70	9.1	132	43.8	78	8	20	-	30	29	10
57	4	70	9.1	132	43.8	78	8	25	-	30	29	10
58	4	70	9.1	132	43.8	78	8	27	-	30	29	10
59	4	70	9.1	132	43.8	78	8	28	-	30	29	10
60	4	70	9.1	132	43.8	78	8	30	-	30	29	10
61	4	70	9.1	132	43.8	78	9	1	-	30	29	10
62	4	70	9.1	132	43.8	78	9	3	-	30	29	10
63	4	70	9.1	132	43.8	78	9	4	-	30	29	9
64	4	70	9.1	132	43.8	78	9	5	-	30	29	10
65	4	70	9.1	132	43.8	78	8	7	-	30	29	10
66	4	70	9.1	132	43.8	78	9	9	-	30	29	9
67	4	70	9.1	132	43.8	78	9	11	-	30	29	10
68	4	70	9.1	132	43.8	78	9	13	-	20	29	9
69	4	70	9.1	132	43.8	78	9	15	-	30	29	10
70	4	70	9.1	132	43.8	78	9	17	-	30	29	10
71	4	70	9.1	132	43.8	78	9	19	-	30	29	10
72	4	70	9.1	132	43.8	78	9	23	-	30	29	8
73	4	70	9.1	132	43.8	78	9	24	-	30	29	9
74	4	70	9.1	132	43.8	78	9	25	-	30	29	10
75	4	70	9.1	132	43.8	78	9	26	-	30	29	10
76	4	70	9.1	132	43.8	78	9	27	-	30	29	10
77	4	70	9.1	132	43.8	78	9	28	-	30	29	7
78	4	70	9.1	132	43.8	78	9	29	-	30	29	4
79	4	70	9.1	132	43.8	78	9	30	-	30	29	10
80	4	70	9.1	132	43.8	78	10	1	-	30	29	10
81	4	70	9.1	132	43.8	78	10	4	-	30	29	10
82	4	70	9.1	132	43.8	78	10	5	-	30	29	10
83	4	70	9.1	132	43.8	78	10	7	-	30	29	10
84	4	70	9.1	132	43.8	78	10	8	-	30	29	10

CON	STN	LAT DEG	LAT MIN	LON DEG	LON MIN	DATE YR	DATE MO	DATE DY	DATE HR	CAST TO (M)	WATER DEPTH (M)	PTS
85	4	70	9.1	132	43.8	78	10	9	-	30	29	10
86	4	70	9.1	132	43.8	78	10	10	-	30	29	10
1	4	70	9.1	132	43.8	78	7	15	-	30	29	9
2	4	70	9.1	132	43.8	78	7	18	-	30	29	8
3	4	70	9.1	132	43.8	78	7	20	-	30	29	9
4	4	70	9.1	132	43.8	78	7	22	-	30	29	10
5	4	70	9.1	132	43.8	78	7	27	-	40	29	11
99	4	70	9.1	132	43.8	78	9	7	-	30	29	8
100	4	70	9.1	132	43.8	78	9	9	-	30	29	9
101	4	70	9.1	132	43.8	78	9	12	-	30	29	9
102	4	70	9.1	132	43.8	78	9	16	-	30	29	10
103	4	70	9.1	132	43.8	78	9	19	-	30	29	9
104	4	70	9.1	132	43.8	78	9	26	-	30	29	7
97	10	69	54.2	136	20.3	78	8	20	-	20	23	9
98	10	69	54.2	136	20.3	78	9	6	-	30	23	9
38	12	70	34.1	130	19.3	78	7	13	-	20	29	9
39	12	70	34.1	130	19.3	78	7	15	-	20	29	9
90	12	70	34.1	130	19.3	78	7	19	-	20	29	8
91	12	70	34.1	130	19.3	78	8	1	-	20	29	9
92	12	70	34.1	130	19.3	78	8	3	-	20	29	9
94	12	70	34.1	130	19.3	78	8	7	-	50	29	12
6	2	70	22.9	135	5.6	78	7	29	-	40	57	11
7	2	70	22.9	135	5.6	78	8	1	-	40	57	11
8	2	70	22.9	135	5.6	78	8	3	-	40	57	11
9	2	70	22.9	135	5.6	78	8	5	-	40	57	11
10	2	70	22.9	135	5.6	78	8	8	-	40	57	11
12	2	70	22.9	135	5.6	78	8	15	-	50	57	12
11	2	70	22.9	135	5.6	78	8	13	-	50	57	12
13	2	70	22.9	135	5.6	78	8	17	-	30	57	10
14	2	70	22.9	135	5.6	78	8	20	-	50	57	12
15	2	70	22.9	135	5.6	78	8	22	-	50	57	12
16	2	70	22.9	135	5.6	78	8	24	-	50	57	12
17	2	70	22.9	135	5.6	78	8	30	-	50	57	12
18	2	70	22.9	135	5.6	78	9	1	-	50	57	12
19	2	70	22.9	135	5.6	78	9	3	-	50	57	12
20	2	70	22.9	135	5.6	78	9	7	-	50	57	12
21	2	70	22.9	135	5.6	78	9	10	-	50	57	12
22	2	70	22.9	135	5.6	78	9	12	-	50	57	12
23	2	70	22.9	135	5.6	78	9	14	-	50	57	12
24	2	70	22.9	135	5.6	78	9	19	-	50	57	12
25	2	70	22.9	135	5.6	78	9	21	-	50	57	12
26	2	70	22.9	135	5.6	78	9	23	-	50	57	12
27	2	70	22.9	135	5.6	78	9	24	-	50	57	12
28	2	70	22.9	135	5.6	78	9	25	-	50	57	12
29	2	70	22.9	135	5.6	78	9	26	-	50	57	12
30	2	70	22.9	135	5.6	78	9	27	-	50	57	12

CON	STN	LAT DEG	LAT MIN	LON DEG	LON MIN	DATE YR	DATE MO	DATE DY	DATE HR	CAST TO (M)	WATER DEPTH (M)	PTS
31	2	70	22.9	135	5.6	78	9	28	-	50	57	12
32	2	70	22.9	135	5.6	78	9	29	-	50	57	12
33	2	70	22.9	135	5.6	78	9	30	-	50	57	12
34	2	70	22.9	135	5.6	78	10	1	-	50	57	12
35	2	70	22.9	135	5.6	78	10	2	-	50	57	12
36	2	70	22.9	135	5.6	78	10	3	-	50	57	12
37	2	70	22.9	135	5.6	78	10	4	-	15	57	8
38	2	70	22.9	135	5.6	78	10	5	-	50	57	12
39	2	70	22.9	135	5.6	78	10	6	-	50	57	12
40	2	70	22.9	135	5.6	78	10	7	-	50	57	12
41	2	70	22.9	135	5.6	78	10	8	-	50	57	12
105	2	70	22.9	135	5.6	78	10	9	-	50	57	12
106	2	70	22.9	135	5.6	78	0	0	-	0	57	0

BOTTLE /CTD DATA SET NUMBER:78-0002 YEAR: 1978

CON	STN	LAT DEG	LAT MIN	LON DEG	LON MIN	DATE YR	DATE MO	DATE DY	DATE HR	CAST TO (M)	WATER DEPTH (M)	PTS
1	0	70	10.6	130	58.9	78	7	15	11.0	29	31	12
2	1NE	70	10.6	130	58.9	78	7	15	13.3	36	34	14
21	1NW	70	10.6	130	58.9	78	7	18	4.0	30	34	8
21	1NW	70	10.6	130	58.9	78	7	18	4.0	33	34	11
3	2NE	70	10.6	130	58.9	78	7	15	10.0	32	33	12
16	2SE	70	10.6	130	58.9	78	7	17	13.0	32	31	14
11	2SW	70	10.6	130	58.9	78	7	16	18.5	34	34	15
11	2SW	70	10.6	130	58.9	78	7	16	18.5	35	34	16
17	2NW	70	10.6	130	58.9	78	7	17	15.8	30	31	42
17	2NW	70	10.6	130	58.9	78	7	17	15.8	31	31	3
4	3NE	70	10.6	130	58.9	78	7	15	22.5	32	33	11
15	3SE	70	10.6	130	58.9	78	7	17	10.5	31	33	11
9	3SW	70	10.6	130	58.9	78	7	16	15.8	31	-	18
18	3NW	70	10.6	130	58.9	78	7	17	19.8	28	30	9
5	4NW	70	10.6	130	58.9	78	7	16	2.0	20	30	5
5	4NE	70	10.6	130	58.9	78	7	16	2.0	29	30	9
14	4SE	70	10.6	130	58.9	78	7	17	7.5	26	27	12
8	4SW	70	10.6	130	58.9	78	7	16	12.5	26	27	13
19	4NW	70	10.6	130	58.9	78	7	17	21.7	26	29	6
12	5NE	70	10.6	130	58.9	78	7	16	22.0	26	27	9
10	5SE	70	10.6	130	58.8	78	7	16	17.0	26	27	11
7	5SW	70	10.6	130	59.0	78	7	16	10.5	26	27	9
20	5NW	70	10.6	130	59.0	78	7	17	23.5	26	27	6
13	6NE	70	10.7	130	58.7	78	7	17	1.0	26	28	8

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO (M)	DEPTH (M)	
6	6SW	70	10.5	130	59.1	78	7	16	7.0	26	27	8
23	7SE	70	10.2	130	57.8	78	7	18	21.0	26	27	10
22	8NE	70	12.1	130	54.4	78	7	18	11.7	29	30	12
26	1	70	10.6	130	58.9	78	9	23	20.0	32	-	16
27	2	70	10.6	130	58.9	78	9	24	0.0	32	-	26
24	1	70	23.4	135	49.9	78	7	19	-	52	55	17
24	2	70	23.4	135	49.9	78	7	19	-	52	55	16
25	3	70	23.4	135	49.9	78	7	19	22.0	50	55	10
28	1	70	23.4	135	49.9	78	9	24	16.8	37	-	40

BOTTLE /CTD DATA SET NUMBER:78-0018 YEAR: 1978

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO (M)	DEPTH (M)	
1	1	69	32.5	136	12.1	78	7	20	-	18	20	18
2	2	69	32.5	136	12.1	78	7	20	-	18	20	18
3	3	69	32.5	136	12.1	78	7	20	-	18	20	18
4	4	69	32.5	136	12.1	78	7	20	-	18	20	18

BOTTLE /CTD DATA SET NUMBER:79-0001 YEAR: 1979

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO (M)	DEPTH (M)	
1	1	70	50.0	131	0.0	79	11	27	3.0	47	0	0
2	2	72	54.0	128	53.0	79	11	27	21.2	411	0	0
3	3	72	10.0	132	30.0	79	11	28	20.7	407	0	0
3	3	72	14.0	132	45.0	79	11	30	21.0	414	0	0
4	4	71	50.0	137	15.0	79	11	26	19.1	408	0	0
5	5	70	8.0	135	38.0	79	11	30	.8	44	0	0
6	6	71	7.0	126	41.0	79	11	29	5.6	288	0	0
7	7	72	0.0	127	20.0	79	11	29	7.0	372	0	0
8	8	71	25.0	133	30.0	79	11	27	4.8	412	0	0
9	9	71	37.0	130	22.0	79	11	29	8.6	408	0	0
10	10	73	1.0	134	52.0	79	11	25	22.0	408	0	0
11	11	71	0.0	136	30.0	79	11	26	20.6	407	0	0
12	12	70	25.0	139	0.0	79	11	24	22.5	405	0	0

BOTTLE /CTD DATA SET NUMBER:79-0003 YEAR: 1979

CON	STN	LAT		LON		DATE				CAST TO (M)	WATER DEPTH (M)	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR			
1	6	69	45.4	139	44.6	79	8	15	22.2	30	34	10
2	6	69	45.4	139	44.6	79	8	17	22.2	30	34	11
3	6	69	45.4	139	44.6	79	8	22	1.0	15	34	9
4	6	69	45.4	139	44.6	79	8	23	23.0	30	34	10
4	6	69	45.4	139	44.6	79	8	23	23.0	15	34	9
5	6	69	45.4	139	44.6	79	8	24	1.0	14	34	8
5	6	69	45.4	139	44.6	79	8	24	1.0	30	34	10
6	6	69	45.4	139	44.6	79	8	28	21.2	6	34	5
7	6	69	45.4	139	44.6	79	9	7	1.0	30	34	10
7	6	69	45.4	139	44.6	79	9	7	1.0	30	34	10
8	6	69	45.4	139	44.6	79	9	8	16.0	30	34	10
8	6	69	45.4	139	44.6	79	9	8	16.0	15	34	8
9	6	69	45.4	139	44.6	79	9	9	16.0	30	34	10
10	6	69	45.4	139	44.6	79	9	10	16.0	30	34	11
11	6	69	45.4	139	44.6	79	9	16	16.0	30	34	11
12	6	69	45.4	139	44.6	79	9	17	22.0	30	34	11
13	6	69	45.4	139	44.6	79	9	18	21.0	30	34	11
14	6	69	45.4	139	44.6	79	9	19	19.3	30	34	11
15	6	69	45.4	139	44.6	79	9	21	18.0	30	34	11
16	6	69	45.4	139	44.6	79	9	22	16.0	20	34	10
17	6	69	45.4	139	44.6	79	9	25	18.3	30	34	11
18	6	69	45.4	139	44.6	79	9	27	20.0	30	34	9
19	6	69	45.4	139	44.6	79	10	2	20.1	30	34	8
20	6	69	45.4	139	44.6	79	10	6	20.1	20	34	7
21	6	69	45.4	139	44.6	79	10	6	23.3	30	34	8
22	6	69	45.4	139	44.6	79	10	7	6.0	30	34	9
23	6	69	45.4	139	44.6	79	10	7	22.0	30	34	10
1	10	69	45.4	139	44.6	79	7	14	19.0	22	34	11
2	10	69	45.4	139	44.6	79	7	14	21.0	22	34	10
3	10	69	45.4	139	44.6	79	7	17	21.0	22	34	11
4	10	69	54.2	136	20.3	79	7	19	19.0	22	23	10
5	10	69	54.2	136	20.3	79	7	21	17.0	22	23	11
6	10	69	54.2	136	20.3	79	7	23	19.1	22	23	11
7	10	69	54.2	136	20.3	79	7	26	19.0	22	23	10
8	10	69	54.2	136	20.3	79	7	28	19.0	20	23	10
9	10	69	54.2	136	20.3	79	7	30	19.0	22	23	11
10	10	69	54.2	136	20.3	79	8	1	22.0	20	23	10
11	10	69	54.2	136	20.3	79	8	2	22.2	22	23	10
12	10	69	54.2	136	20.3	79	8	3	19.0	22	23	11
13	10	69	54.2	136	20.3	79	8	5	19.0	20	23	10
14	10	69	54.2	136	20.3	79	8	7	19.0	22	23	11
15	10	69	54.2	136	20.3	79	8	9	19.0	22	23	10
16	10	69	54.2	136	20.3	79	8	11	19.0	20	23	10
17	10	69	54.2	136	20.3	79	8	14	20.0	20	23	10
18	10	69	54.2	136	20.3	79	8	17	14.0	22	23	11

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO (M)	DEPTH (M)	
19	10	69	54.2	136	20.3	79	8	17	20.1	20	23	10
20	10	69	54.2	136	20.3	79	8	19	16.0	22	23	11
21	10	69	54.2	136	20.3	79	8	21	19.0	22	23	11
22	10	69	54.2	136	20.3	79	8	23	18.1	22	23	11
23	10	69	54.2	136	20.3	79	8	26	19.0	22	23	10
24	10	69	54.2	136	20.3	79	8	28	19.0	20	23	10
25	10	69	54.2	136	20.3	79	8	31	1.0	22	23	11
26	10	69	54.2	136	20.3	79	8	31	23.0	22	23	11
27	10	69	54.2	136	20.3	79	9	1	0.0	15	23	7
28	10	69	54.2	136	20.3	79	9	1	1.0	21	23	12
29	10	69	54.2	136	20.3	79	9	3	1.0	21	23	12
29	10	69	54.2	136	20.3	79	9	3	1.0	22	23	11
30	10	69	54.2	136	20.3	79	9	4	19.0	20	23	9
30	10	69	54.2	136	20.3	79	9	4	19.0	20	23	10
31	10	69	54.2	136	20.3	79	9	12	19.2	22	23	11
32	10	69	54.2	136	20.3	79	9	13	20.0	20	23	10
33	10	69	54.2	136	20.3	79	9	15	20.0	20	23	10
34	10	69	54.2	136	20.3	79	9	16	20.0	22	23	11
35	10	69	54.2	136	20.3	79	9	17	20.0	22	23	11
36	10	69	54.2	136	20.3	79	9	18	20.0	22	23	11
37	10	69	54.2	136	20.3	79	9	21	21.2	30	23	11
38	10	69	54.2	136	20.3	79	9	22	20.0	30	23	11
39	10	69	54.2	136	20.3	79	9	23	22.0	22	23	11
40	10	69	54.2	136	20.3	79	9	24	21.1	22	23	8
41	10	69	54.2	136	20.3	79	9	26	7.1	20	23	10
42	10	69	54.2	136	20.3	79	9	26	21.3	22	23	11
43	10	69	54.2	136	20.3	79	9	27	22.3	20	23	10
44	10	69	54.2	136	20.3	79	9	28	20.0	22	23	6
45	10	69	54.2	136	20.3	79	9	29	20.0	22	23	11
46	10	69	54.2	136	20.3	79	9	30	20.0	20	23	10
47	10	69	54.2	136	20.3	79	10	1	22.0	30	23	11
48	10	69	54.2	136	20.3	79	10	2	22.0	22	23	11
49	10	69	54.2	136	20.3	79	10	3	22.0	22	23	9
50	10	69	54.2	136	20.3	79	10	5	22.0	22	23	11
51	10	69	54.2	136	20.3	79	10	6	22.0	22	23	11
52	10	69	54.2	136	20.3	79	10	8	2.0	22	23	11
53	10	69	54.2	136	20.3	79	10	8	21.0	22	23	11
54	10	69	54.2	136	20.3	79	10	9	19.0	20	23	7
55	10	69	54.2	136	20.3	79	10	9	6.0	20	23	7
56	10	69	54.2	136	20.3	79	10	10	19.3	20	23	10
57	10	69	54.2	136	20.3	79	10	11	6.0	20	23	10
58	10	69	54.2	136	20.3	79	10	12	22.0	20	23	10
59	10	69	54.2	136	20.3	79	10	13	21.0	20	23	10
60	10	69	54.2	136	20.3	79	10	14	21.0	20	23	10
61	10	69	54.2	136	20.3	79	10	15	21.0	20	23	10
62	10	69	54.2	136	20.3	79	10	16	23.0	20	23	10

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO	DEPTH	
										(M)	(M)	
63	10	69	54.2	136	20.3	79	10	17	20.0	20	23	10
1	4	70	9.1	132	43.8	79	7	12	21.3	30	29	10
2	4	70	9.1	132	43.8	79	7	15	22.0	30	29	9
3	4	70	9.1	132	43.8	79	7	17	15.0	30	29	10
4	4	70	9.1	132	43.8	79	7	18	6.0	20	29	9
5	4	70	9.1	132	43.8	79	7	19	22.0	30	29	9
6	4	70	9.1	132	43.8	79	7	20	20.0	30	29	10
7	4	70	9.1	132	43.8	79	7	21	14.0	30	29	10
8	4	70	9.1	132	43.8	79	7	22	20.4	28	29	9
9	4	70	9.1	132	43.8	79	7	24	22.0	30	31	9
10	4	70	9.1	132	43.8	79	7	25	22.0	30	31	11
11	4	70	9.1	132	43.8	79	7	26	14.0	30	31	10
12	4	70	9.1	132	43.8	79	7	29	13.0	28	29	10
13	4	70	9.1	132	43.8	79	8	4	2.0	29	29	11
14	4	70	9.1	132	43.8	79	8	5	1.0	29	29	11
15	4	70	9.1	132	43.8	79	8	6	2.3	29	29	11
16	4	70	9.1	132	43.8	79	8	7	1.3	29	29	11
17	4	70	9.1	132	43.8	79	8	8	2.0	29	29	12
18	4	70	9.1	132	43.8	79	8	8	21.0	29	29	12
26	9	70	23.7	135	17.0	79	10	12	6.0	50	55	5
28	9	70	23.7	135	17.0	79	10	13	18.0	40	55	12
30	9	70	23.7	135	17.0	79	10	14	18.0	15	55	9
32	9	70	23.7	135	17.0	79	10	15	18.0	50	55	11
35	9	70	23.7	135	17.0	79	10	17	18.0	50	55	13
36	9	70	23.7	135	17.0	79	10	20	0.0	50	55	13
1	9	70	23.7	135	17.0	79	9	14	20.1	30	55	10
2	9	70	23.7	135	17.0	79	9	15	21.1	40	55	9
3	9	70	23.7	135	17.0	79	9	16	21.1	40	55	7
5	9	70	23.7	135	17.0	79	9	17	21.4	40	55	11
4	9	70	23.7	135	17.0	79	9	17	21.1	40	55	11
6	9	70	23.7	135	17.0	79	9	21	20.0	50	55	13
7	9	70	23.7	135	17.0	79	9	22	20.0	50	55	13
8	9	70	23.7	135	17.0	79	9	23	21.0	30	55	11
9	9	70	23.7	135	17.0	79	9	24	20.0	50	55	13
10	9	70	23.7	135	17.0	79	9	25	20.0	50	55	13
11	9	70	23.7	135	17.0	79	9	26	21.0	50	55	12
12	9	70	23.7	135	17.0	79	9	27	20.0	50	55	12
13	9	70	23.7	135	17.0	79	9	28	19.3	50	55	13
14	9	70	23.7	135	17.0	79	9	29	19.3	50	55	12
15	9	70	23.7	135	17.0	79	9	30	20.0	50	55	13
16	9	70	23.7	135	17.0	79	10	1	20.0	30	55	11
17	9	70	23.7	135	17.0	79	10	2	20.0	50	55	13
18	9	70	23.7	135	17.0	79	10	3	20.3	50	55	13
19	9	70	23.7	135	17.0	79	10	4	20.3	50	55	13
20	9	70	23.7	135	17.0	79	10	5	20.0	50	55	13
21	9	70	23.7	135	17.0	79	10	6	20.0	50	55	13

CON	STN	LAT DEG	LAT MIN	LON DEG	LON MIN	DATE YR	DATE MO	DATE DY	DATE HR	CAST TO (M)	WATER DEPTH (M)	PTS
22	9	70	23.7	135	17.0	79	10	7	20.0	50	55	13
23	9	70	23.7	135	17.0	79	10	8	20.0	50	55	13
24	9	70	23.7	135	17.0	79	10	10	21.0	20	55	10
25	9	70	23.7	135	17.0	79	10	11	20.0	50	55	13
27	9	70	23.7	135	17.0	79	10	12	20.0	50	55	13
29	9	70	23.7	135	17.0	79	10	13	20.0	50	55	13
31	9	70	23.7	135	17.0	79	10	14	21.3	50	55	13
33	9	70	23.7	135	17.0	79	10	15	20.0	50	55	13
34	9	70	23.7	135	17.0	79	10	16	20.3	50	55	13
37	9	70	23.7	135	17.0	79	10	20	20.0	50	55	13
1	13	70	27.6	133	25.1	79	7	17	3.0	50	52	13
2	13	70	27.6	133	25.1	79	7	18	14.3	50	52	13
3	13	70	27.6	133	25.1	79	7	20	20.0	50	52	11
4	13	70	27.6	133	25.1	79	7	25	21.4	50	52	13
5	13	70	27.6	133	25.1	79	7	28	21.3	50	52	12
6	13	70	27.6	133	25.1	79	8	2	20.3	50	52	12
7	13	70	27.6	133	25.1	79	8	4	20.3	50	52	12
8	13	70	27.6	133	25.1	79	8	5	20.3	50	52	12
9	13	70	27.6	133	25.1	79	8	8	20.3	50	52	12
10	13	70	27.6	133	25.1	79	8	12	20.0	50	52	13
11	13	70	27.6	133	25.1	79	8	15	22.0	30	52	11
12	13	70	27.6	133	25.1	79	8	18	18.0	50	52	13
13	13	70	27.6	133	25.1	79	8	20	21.0	20	52	10
14	13	70	27.6	133	25.1	79	8	21	20.0	30	52	11
15	13	70	27.6	133	25.1	79	8	22	21.0	0	52	0
16	13	70	27.6	133	25.1	79	8	24	22.0	50	52	13
17	13	70	27.6	133	25.1	79	8	25	20.0	50	52	12
18	13	70	27.6	133	25.1	79	8	27	20.0	50	52	12
19	13	70	27.6	133	25.1	79	8	29	13.3	48	52	14
21	13	70	27.6	133	25.1	79	8	29	14.3	50	52	12
20	13	70	27.6	133	25.1	79	8	29	14.1	13	52	8
22	13	70	27.6	133	25.1	79	9	1	1.5	50	52	13
23	13	70	27.6	133	25.1	79	9	1	23.1	50	52	13
24	13	70	27.6	133	25.1	79	9	2	20.0	40	52	12
25	13	70	27.6	133	25.1	79	9	7	2.0	50	52	13
26	13	70	27.6	133	25.1	79	9	9	2.0	50	52	13
27	13	70	27.6	133	25.1	79	9	9	23.0	50	52	13
29	13	70	27.6	133	25.1	79	9	11	2.0	40	52	12
28	13	70	27.6	133	25.1	79	9	11	1.0	50	52	15
31	13	70	27.6	133	25.1	79	9	11	22.0	50	52	13
30	13	70	27.6	133	25.1	79	9	11	21.0	40	52	11
32	13	70	27.6	133	25.1	79	9	12	22.0	40	52	12
33	13	70	27.6	133	25.1	79	9	13	21.3	50	52	13
34	13	70	27.6	133	25.1	79	9	14	23.0	50	52	13
35	13	70	27.6	133	25.1	79	9	15	22.0	50	52	13
36	13	70	27.6	133	25.1	79	9	16	22.3	40	52	12

CON	STN	LAT		LON		DATE				CAST TO (M)	WATER DEPTH (M)	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR			
37	13	70	27.6	133	25.1	79	9	17	22.0	50	52	13
38	13	70	27.6	133	25.1	79	9	20	1.0	50	52	13
39	13	70	27.6	133	25.1	79	9	20	20.0	50	52	13
40	13	70	27.6	133	25.1	79	9	21	20.0	40	52	12
41	13	70	27.6	133	25.1	79	9	23	23.0	50	52	12
42	13	70	27.6	133	25.1	79	9	27	18.0	50	52	11
43	13	70	27.6	133	25.1	79	9	29	17.2	50	52	13
44	13	70	27.6	133	25.1	79	9	30	23.0	40	52	12
45	13	70	27.6	133	25.1	79	10	3	17.0	50	52	12
46	13	70	27.6	133	25.1	79	10	4	20.0	50	52	13
47	13	70	27.6	133	25.1	79	10	5	6.0	50	52	13
48	13	70	27.6	133	25.1	79	10	6	14.0	2	52	3
49	13	70	27.6	133	25.1	79	10	8	1.3	50	52	8
50	13	70	27.6	133	25.1	79	10	8	21.3	60	52	8
51	13	70	27.6	133	25.1	79	10	10	20.0	0	52	0
52	13	70	27.6	133	25.1	79	10	11	21.0	40	52	3
53	13	70	27.6	133	25.1	79	10	12	21.0	50	52	9
54	13	70	27.6	133	25.1	79	10	13	21.0	50	52	11
55	13	70	27.6	133	25.1	79	10	15	0.0	50	52	13
56	13	70	27.6	133	25.1	79	10	17	1.1	50	52	12
57	13	70	27.6	133	25.1	79	10	17	21.3	50	52	13
58	13	70	27.6	133	25.1	79	10	18	17.0	50	52	13
59	13	70	27.6	133	25.1	79	10	18	16.1	50	52	13
60	13	70	27.6	133	25.1	79	10	19	21.1	30	52	10
61	13	70	27.6	133	25.1	79	10	20	21.1	50	52	12

BOTTLE /CTD DATA SET NUMBER:79-0005 YEAR: 1979

CON	STN	LAT		LON		DATE				CAST TO (M)	WATER DEPTH (M)	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR			
1	1	70	6.5	125	2.0	79	5	21	-	14	-	13
2	2	70	6.3	125	2.5	79	5	22	-	14	-	13
3	3	70	6.7	125	4.1	79	5	23	-	14	-	12
4	4	70	7.1	125	4.2	79	5	24	-	15	-	13
4	5	70	4.5	125	0.0	79	5	24	-	14	-	13
4	6	70	6.0	124	59.0	79	5	24	-	25	-	21
5	1	70	5.2	125	1.2	79	6	18	-	41	-	25
5	2	70	6.6	125	2.5	79	6	18	-	15	-	22
5	3	70	7.0	125	3.0	79	6	18	-	14	-	20
6	4	70	5.9	125	1.5	79	6	19	-	29	-	28
6	5	70	6.4	124	58.4	79	6	19	-	37	-	26
6	6	70	9.1	124	53.2	79	6	19	-	18	-	19

CON	STN	LAT DEG	LAT MIN	LON DEG	LON MIN	DATE YR	DATE MO	DATE DY	DATE HR	CAST TO (M)	WATER DEPTH (M)	PTS
7	1	70	6.7	125	3.5	79	9	19	-	13	-	14
7	2	70	6.6	125	2.2	79	9	19	-	11	-	12
7	3	70	6.0	125	.5	79	9	19	-	25	-	13
7	4	70	5.4	125	.7	79	9	19	-	22	-	13
7	5	70	6.4	124	57.6	79	9	19	-	23	-	12
7	6	70	7.3	124	55.7	79	9	19	-	22	-	13
7	7	70	8.6	124	54.0	79	9	19	-	22	-	12

BOTTLE /CTD DATA SET NUMBER:79-0005 YEAR: 1979

CON	STN	LAT DEG	LAT MIN	LON DEG	LON MIN	DATE YR	DATE MO	DATE DY	DATE HR	CAST TO (M)	WATER DEPTH (M)	PTS
1	1	70	46.2	129	21.4	79	7	22	8.5	25	25	25

BOTTLE /CTD DATA SET NUMBER:79-0005 YEAR: 1979

CON	STN	LAT DEG	LAT MIN	LON DEG	LON MIN	DATE YR	DATE MO	DATE DY	DATE HR	CAST TO (M)	WATER DEPTH (M)	PTS
1	1	70	6.5	125	2.0	79	5	21	-	14	-	13
2	2	70	6.3	125	2.5	79	5	22	-	14	-	13
3	3	70	6.7	125	4.1	79	5	23	-	14	-	12
4	4	70	7.1	125	4.2	79	5	24	-	15	-	13
4	5	70	4.5	125	0.0	79	5	24	-	14	-	13
4	6	70	6.0	124	59.0	79	5	24	-	25	-	21
5	1	70	5.2	125	1.2	79	6	18	-	41	-	25
5	2	70	6.6	125	2.5	79	6	18	-	15	-	22
5	3	70	7.0	125	3.0	79	6	18	-	14	-	20
6	4	70	5.9	125	1.5	79	6	19	-	29	-	28
6	5	70	6.4	124	58.4	79	6	19	-	37	-	26
6	6	70	9.1	124	53.2	79	6	19	-	18	-	19
7	1	70	6.7	125	3.5	79	9	19	-	13	-	14
7	2	70	6.6	125	2.2	79	9	19	-	11	-	12
7	3	70	6.0	125	.5	79	9	19	-	25	-	13
7	4	70	5.4	125	.7	79	9	19	-	22	-	13
7	5	70	6.4	124	57.6	79	9	19	-	23	-	12
7	6	70	7.3	124	55.7	79	9	19	-	22	-	13
7	7	70	8.6	124	54.0	79	9	19	-	22	-	12

BOTTLE /CTD DATA SET NUMBER:79-0007 YEAR: 1979

CON	STN	LAT		LON		DATE				CAST TO (M)	WATER DEPTH (M)	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR			
1	1	70	46.2	129	21.4	79	7	22	8.5	25	25	25

BOTTLE /CTD DATA SET NUMBER:79-0010 YEAR: 1979

CON	STN	LAT		LON		DATE				CAST TO (M)	WATER DEPTH (M)	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR			
39	A	70	2.3	131	5.1	79	9	27	-	10	-	10
40	B	70	.5	131	6.5	79	9	27	-	9	-	10
41	C	69	57.8	131	8.0	79	9	27	-	7	-	13
42	D	69	56.0	131	7.3	79	9	27	-	5	-	5
1	1	69	58.6	131	7.5	79	9	25	-	4	-	5
2	2	69	58.6	131	7.5	79	9	25	-	6	-	7
3	3	69	58.6	131	7.5	79	9	25	-	6	-	6
4	4	69	58.6	131	7.5	79	9	25	-	6	-	6
5	5	69	58.6	131	7.5	79	9	25	-	6	-	6
6	6	69	58.6	131	7.5	79	9	25	-	6	-	7
7	7	69	58.6	131	7.5	79	9	25	-	8	-	9
8	8	69	58.6	131	7.5	79	9	25	-	11	-	12
9	9	69	58.6	131	7.5	79	9	25	-	6	-	7
10	10	69	58.6	131	7.5	79	9	25	-	7	-	7
11	11	69	58.6	131	7.5	79	9	25	-	6	-	7
12	12	69	58.6	131	7.5	79	9	25	-	7	-	8
13	13	69	58.6	131	7.5	79	9	25	-	8	-	9
14	14	69	58.6	131	7.5	79	9	25	-	8	-	8
15	15	69	58.6	131	7.5	79	9	25	-	7	-	9
16	16	69	56.8	131	7.5	79	9	25	-	7	-	8
17	17	69	56.8	131	7.5	79	9	25	-	8	-	9
18	18	69	56.8	131	7.5	79	9	25	-	8	-	9
19	19	69	56.8	131	7.5	79	9	25	-	8	-	8
20	20	69	56.8	131	7.5	79	9	25	-	6	-	7
21	21	69	56.8	131	7.5	79	9	25	-	2	-	3
22	22	69	56.8	131	7.5	79	9	25	-	7	-	10
23	23	69	56.8	131	7.5	79	9	25	-	7	-	11
24	24	69	56.8	131	7.5	79	9	25	-	6	-	12
25	25	69	56.8	131	7.5	79	9	25	-	4	-	8
26	26	69	56.8	131	7.5	79	9	25	-	3	-	6
27	27	69	56.8	131	7.5	79	9	25	-	5	-	8
28	28	69	56.8	131	7.5	79	9	25	-	7	-	12
29	29	69	56.8	131	7.5	79	9	25	-	7	-	13
30	30	69	56.8	131	7.5	79	9	25	-	6	-	11
32	31	69	56.8	131	7.5	79	9	26	-	5	-	9

CON	STN	LAT DEG	LAT MIN	LON DEG	LON MIN	DATE YR	DATE MO	DATE DY	DATE HR	CAST TO (M)	WATER DEPTH (M)	PTS
33	32	69	56.8	131	7.5	79	9	26	-	7	-	13
34	33	69	56.8	131	7.5	79	9	26	-	8	-	15
35	34	69	56.8	131	7.5	79	9	26	-	11	-	21
36	35	69	56.8	131	7.5	79	9	26	-	7	-	13
31	EP	69	56.8	131	7.5	79	9	25	10.5	4	-	5
37	EP	69	56.8	131	7.5	79	9	26	16.5	3	-	7
38	EP	69	56.8	131	7.5	79	9	26	16.5	2	-	4

BOTTLE /CTD DATA SET NUMBER:80-0002   YEAR: 1980

CON	STN	LAT	LON	DATE				CAST	WATER	PTS
		DEG MIN	DEG MIN	YR	MO	DY	HR	TO (M)	DEPTH (M)	
1	12	70 43.4	133 58.1	80	8	1	23.5	20	-	9
2	12	70 43.4	133 58.1	80	8	2	14.5	48	-	13
3	12	70 43.4	133 58.1	80	8	2	15.0	48	-	13
4	12	70 43.4	133 58.1	80	8	5	16.8	50	-	13
5	12	70 43.4	133 58.1	80	8	7	23.0	50	-	12
6	12	70 43.4	133 58.1	80	8	10	9.2	50	-	13
7	12	70 43.4	133 58.1	80	8	12	13.3	43	-	13
8	12	70 43.4	133 58.1	80	8	12	14.3	50	-	13
9	12	70 43.4	133 58.1	80	8	15	14.3	20	-	10
10	12	70 43.4	133 58.1	80	8	20	13.3	40	-	12
11	12	70 43.4	133 58.1	80	8	23	11.5	40	-	12
12	12	70 43.4	133 58.1	80	8	23	14.0	40	-	12
13	12	70 43.4	133 58.1	80	8	25	19.0	30	-	11
14	12	70 43.4	133 58.1	80	8	27	19.8	40	-	12
15	12	70 43.4	133 58.1	80	8	29	17.0	30	-	11
16	12	70 43.4	133 58.1	80	8	31	15.3	30	-	11
17	14	70?51.4	129?27.5	80	9	19	17.0	20	-	9
18	14	70?51.4	129?27.5	80	9	17	14.0	30	-	11
19	14	70?51.4	129?27.5	80	9	15	9.0	30	-	11
20	14	70?51.4	129?27.5	80	9	15	14.0	17	-	10
21	15	70?20.0	134? 8.0	80	7	14	14.0	48	-	13
22	15	70?20.0	134? 8.0	80	7	14	15.0	45	-	13
23	15	70?20.0	134? 8.0	80	7	15	17.0	48	-	13
24	15	70?20.0	134? 8.0	80	7	16	19.0	47	-	13
25	15	70?20.0	134? 8.0	80	7	19	19.0	47	-	13
26	15	70?20.0	134? 8.0	80	7	20	19.0	48	-	13
27	15	70?20.0	134? 8.0	80	7	22	19.5	48	-	13
28	15	70?20.0	134? 8.0	80	7	24	19.0	47	-	13
29	15	70?20.0	134? 8.0	80	7	24	19.0	47	-	13
30	15	70?20.0	134? 8.0	80	7	25	19.1	47	-	13
31	15	70?20.0	134? 8.0	80	7	27	19.5	47	-	13
32	15	70?20.0	134? 8.0	80	7	29	19.5	47	-	13
33	15	70?20.0	134? 8.0	80	7	30	19.0	47	-	13
34	15	70?20.0	134? 8.0	80	8	1	19.5	47	-	13
35	15	70?20.0	134? 8.0	80	8	2	19.1	47	-	13
36	15	70?20.0	134? 8.0	80	8	3	22.0	47	-	13
37	15	70?20.0	134? 8.0	80	8	6	13.0	40	-	12
38	15	70?20.0	134? 8.0	80	8	9	12.0	40	-	12
39	15	70?20.0	134? 8.0	80	8	9	16.5	40	-	12
40	15	70?20.0	134? 8.0	80	8	9	16.5	40	-	12
41	15	70?20.0	134? 8.0	80	8	13	15.5	40	-	12
42	15	70?20.0	134? 8.0	80	8	15	14.0	40	-	12
43	15	70?20.0	134? 8.0	80	8	17	14.5	40	-	12
44	15	70?20.0	134? 8.0	80	8	19	15.0	40	-	12
45	15	70?20.0	134? 8.0	80	8	21	15.0	40	-	12

CON	STN	LAT	LON	DATE				CAST	WATER	PTS
		DEG MIN	DEG MIN	YR	MO	DY	HR	TO (M)	DEPTH (M)	
46	15	70?20.0	134? 8.0	80	8	22	13.0	40	-	12
47	15	70?20.0	134? 8.0	80	8	22	12.5	50	-	13
48	15	70?20.0	134? 8.0	80	8	27	20.0	49	-	13
49	15	70?20.0	134? 8.0	80	8	28	17.5	48	-	13
50	15	70?20.0	134? 8.0	80	9	3	21.5	47	-	13
51	15	70?20.0	134? 8.0	80	9	11	16.5	50	-	13
52	15	70?20.0	134? 8.0	80	9	14	11.7	47	-	12
53	15	70?20.0	134? 8.0	80	9	14	11.0	47	-	12
54	15	70?20.0	134? 8.0	80	9	20	11.3	30	-	11
55	15	70?20.0	134? 8.0	80	9	22	16.0	30	-	11
56	15	70?20.0	134? 8.0	80	9	22	15.0	45	-	14
57	15	70?20.0	134? 8.0	80	9	30	20.0	30	-	10
58	15	70?20.0	134? 8.0	80	10	3	15.3	15	-	9
59	10	70 23.7	135 12.0	80	7	14	17.0	50	-	12
60	10	70 23.7	135 12.0	80	7	15	13.5	50	-	14
61	10	70 23.7	135 12.0	80	7	15	14.0	50	-	13
62	10	70 23.7	135 12.0	80	7	17	14.1	50	-	13
63	10	70 23.7	135 12.0	80	7	18	3.0	50	-	13
64	10	70 23.7	135 12.0	80	7	19	13.0	50	-	13
65	10	70 23.7	135 12.0	80	7	20	4.5	50	-	13
66	10	70 23.7	135 12.0	80	7	23	18.0	50	-	13
67	10	70 23.7	135 12.0	80	7	25	17.5	50	-	13
68	10	70 23.7	135 12.0	80	7	28	15.0	50	-	13
69	10	70 23.7	135 12.0	80	8	1	16.0	50	-	13
70	10	70 23.7	135 12.0	80	8	2	17.5	50	-	13
71	10	70 23.7	135 12.0	80	8	3	12.0	50	-	13
72	10	70 23.7	135 12.0	80	8	3	12.0	50	-	13
73	10	70 23.7	135 12.0	80	8	5	15.4	50	-	13
74	10	70 23.7	135 12.0	80	8	7	15.3	50	-	13
75	10	70 23.7	135 12.0	80	8	9	12.1	50	-	13
76	10	70 23.7	135 12.0	80	8	12	13.1	50	-	13
77	10	70 23.7	135 12.0	80	8	14	11.3	50	-	13
78	10	70 23.7	135 12.0	80	8	19	12.5	50	-	13
79	10	70 23.7	135 12.0	80	8	21	12.1	50	-	13
80	10	70 23.7	135 12.0	80	8	23	14.0	50	-	13
81	10	70 23.7	135 12.0	80	8	25	13.0	50	-	13
82	10	70 23.7	135 12.0	80	8	27	15.3	50	-	13
83	10	70 23.7	135 12.0	80	8	27	14.0	49	-	12
84	10	70 23.7	135 12.0	80	8	29	9.0	49	-	12
85	10	70 23.7	135 12.0	80	8	31	12.1	50	-	12
86	10	70 23.7	135 12.0	80	9	3	14.1	50	-	12
87	10	70 23.7	135 12.0	80	9	4	20.0	75	-	13
88	10	70 23.7	135 12.0	80	9	4	20.5	50	-	13
89	10	70 23.7	135 12.0	80	9	5	13.1	50	-	12
90	10	70 23.7	135 12.0	80	9	14	10.0	33	-	11
91	10	70 23.7	135 12.0	80	9	15	11.5	48	-	12

CON	STN	LAT	LON	DATE				CAST	WATER	PTS
		DEG MIN	DEG MIN	YR	MO	DY	HR	TO (M)	DEPTH (M)	
92	10	70 23.7	135 12.0	80	9	15	19.3	49	-	13
93	10	70 23.7	135 12.0	80	9	16	18.3	46	-	13
94	10	70 23.7	135 12.0	80	9	18	10.5	50	-	15
95	10	70 23.7	135 12.0	80	9	21	17.0	44	-	16
96	10	70 23.7	135 12.0	80	9	24	18.5	40	-	11
97	10	70 23.7	135 12.0	80	9	27	19.3	40	-	10
98	10	70 23.7	135 12.0	80	9	28	20.1	20	-	10
99	16	70?20.0	136?34.0	80	7	17	14.3	50	-	13
100	16	99?99.9	999?99.9	80	7	18	10.3	50	-	13
101	16	99?99.9	999?99.9	80	7	21	18.3	60	-	13
102	16	99?99.9	999?99.9	80	7	23	14.0	60	-	13
103	16	99?99.9	999?99.9	80	7	28	21.0	50	-	12
104	16	99?99.9	999?99.9	80	7	31	20.0	56	-	14
105	16	70?20.0	136?34.0	80	8	2	13.1	55	-	14
106	16	70?20.0	136?34.0	80	8	3	15.5	55	-	14
107	16	70?20.0	136?34.0	80	8	5	13.3	55	-	14
108	16	70?20.0	136?34.0	80	8	7	23.0	40	-	12
109	16	70?20.0	136?34.0	80	8	7	23.1	53	-	14
110	16	70?20.0	136?34.0	80	8	9	11.1	50	-	13
111	16	70?20.0	136?34.0	80	8	9	10.3	50	-	13
112	16	70?20.0	136?34.0	80	8	14	15.3	20	-	10
113	16	70?20.0	136?34.0	80	8	17	17.4	50	-	13
114	16	70?20.0	136?34.0	80	8	19	16.5	50	-	13
115	16	70?20.0	136?34.0	80	8	21	17.3	50	-	13
116	16	70?20.0	136?34.0	80	8	23	18.5	50	-	13
117	16	70?20.0	136?34.0	80	8	26	23.1	50	-	13
118	16	70?20.0	136?34.0	80	8	29	14.3	50	-	13
119	16	70?20.0	136?34.0	80	8	31	8.5	50	-	13
120	16	70?20.0	136?34.0	80	9	1	23.5	29	-	10
121	16	70?20.0	136?34.0	80	9	4	14.3	50	-	12
122	16	70?20.0	136?34.0	80	9	4	13.5	50	-	12
123	16	70?20.0	136?34.0	80	9	7	19.5	50	-	12
124	11	69 54.1	136 20.3	80	7	23	21.3	20	-	10
125	11	69 54.1	136 20.3	80	7	25	14.5	20	-	10
126	11	69 54.1	136 20.3	80	7	28	3.5	20	-	10
127	11	69 54.1	136 20.3	80	7	29	7.3	20	-	10
128	11	69 54.1	136 20.3	80	7	11	16.0	15	-	8
129	11	69 54.1	136 20.3	80	7	15	14.5	20	-	10
130	11	69 54.1	136 20.3	80	7	18	4.0	20	-	10
131	11	69 54.1	136 20.3	80	7	21	8.5	20	-	10

BOTTLE /CTD DATA SET NUMBER:80-0004   YEAR: 1980

CON	STN	LAT DEG	LAT MIN	LON DEG	LON MIN	DATE YR	DATE MO	DATE DY	DATE HR	CAST TO (M)	WATER DEPTH (M)	PTS
4	1	69	31.4	133	8.1	80	7	10	12.0	4	5	8
10	2	69	27.7	132	59.6	80	7	10	20.0	6	9	11
9	3	69	26.8	133	1.1	80	7	10	16.2	11	10	19
8	3.5	69	26.8	132	59.7	80	7	10	15.8	7	11	16
6	4	69	26.8	132	58.7	80	7	10	15.2	10	12	18
7	4.5	69	26.8	132	57.9	80	7	10	15.5	8	7	16
2	5	69	26.2	132	58.3	80	7	10	11.0	20	21	25
5	5	69	26.2	132	58.3	80	7	10	14.5	20	21	25
3	6	69	25.3	132	58.1	80	7	10	11.5	18	25	25
1	7	69	24.4	132	59.1	80	7	10	10.8	10	10	21
24	1	69	31.4	133	8.1	80	8	15	9.5	4	5	12
25	1	69	31.4	133	8.1	80	8	15	20.3	5	5	12
23	2	69	27.7	132	59.6	80	8	14	21.3	7	9	15
18	2.5	69	27.3	132	58.7	80	8	13	22.1	7	-	14
22	2.75	69	27.1	132	58.7	80	8	14	20.7	10	12	13
21	3	69	26.8	133	1.1	80	8	14	20.0	10	10	19
20	3.5	69	26.8	132	59.7	80	8	14	19.3	7	11	12
19	4	69	26.8	132	58.7	80	8	14	16.1	12	12	18
14	5	69	26.2	132	58.3	80	8	13	18.3	22	21	30
15	5.5	69	25.7	132	58.4	80	8	13	19.1	20	22	29
16	6	69	25.3	132	58.1	80	8	13	20.0	25	25	35
12	6.5	69	24.9	132	58.5	80	8	12	20.0	10	15	17
13	6.5	69	24.9	132	58.5	80	8	13	16.2	13	15	17
17	6.5	69	24.9	132	58.5	80	8	13	21.1	15	15	23
11	7	69	24.4	132	59.1	80	8	12	16.8	10	10	14
32	1	69	31.4	133	8.1	80	9	6	7.5	5	5	10
33	2	69	27.7	132	59.6	80	9	6	9.0	7	9	15
31	2.75	69	27.1	132	58.7	80	9	5	22.0	10	12	23
34	3	69	26.8	133	1.1	80	9	6	9.7	9	10	22
35	3.5	69	26.8	132	59.7	80	9	6	10.3	12	11	26
37	4	69	26.8	132	58.7	80	9	6	11.9	11	12	24
36	4.5	69	26.8	132	57.9	80	9	6	11.4	8	7	17
26	5	69	26.2	132	58.3	80	9	5	11.5	18	21	19
30	5.5	69	25.7	132	58.4	80	9	5	20.0	29	22	30
29	6	69	25.3	132	58.1	80	9	5	17.0	22	25	28
28	6.5	69	24.9	132	58.5	80	9	5	15.5	16	15	18
27	7	69	24.4	132	59.1	80	9	5	14.6	10	10	14
43	1	69	31.4	133	8.1	80	9	25	14.0	5	5	10
44	2	69	27.7	132	59.6	80	9	25	16.0	7	9	13
45	2.75	69	27.1	132	58.7	80	9	25	17.0	13	12	24
46	3	69	26.8	133	1.1	80	9	25	17.8	10	10	18
47	3.5	69	26.8	132	59.7	80	9	25	19.0	11	11	20
48	4	69	26.8	132	58.7	80	9	25	20.2	11	12	13
49	4.5	69	26.8	132	57.9	80	9	25	21.7	6	7	11
42	5	69	26.2	132	58.3	80	9	24	21.5	20	21	21

CON	STN	LAT		LON		DATE				CAST TO (M)	WATER DEPTH (M)	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR			
41	5.5	69	25.7	132	58.4	80	9	24	20.8	21	22	21
40	6	69	25.3	132	58.1	80	9	24	20.2	24	25	32
39	6.5	69	24.9	132	58.5	80	9	24	17.8	15	15	22
38	7	69	24.4	132	59.1	80	9	24	16.7	9	10	16

BOTTLE /CTD DATA SET NUMBER:80-0016 YEAR: 1980

CON	STN	LAT		LON		DATE				CAST TO (M)	WATER DEPTH (M)	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR			
5	SC	70	2.0	131	10.5	80	4	6	22.0	13	0	12
7	SC	70	2.0	131	10.5	80	4	7	21.5	14	0	13
15	SC	70	2.0	131	10.5	80	4	29	0.0	13	0	11
16	SC	70	2.0	131	10.5	80	4	30	18.8	13	0	11
1	SC	70	2.0	131	10.5	80	4	3	11.2	12	0	9
6	SC	70	2.0	131	10.5	80	4	7	0.0	10	0	9
2	SC	70	2.0	131	10.5	80	4	4	0.0	0	0	1
3	SC	70	2.0	131	10.5	80	4	5	0.0	0	0	1
4	SC	70	2.0	131	10.5	80	4	6	0.0	0	0	1
6	SC	70	2.0	131	10.5	80	4	7	0.0	0	0	1
8	SC	70	2.0	131	10.5	80	4	8	0.0	0	0	1
9	SC	70	2.0	131	10.5	80	4	9	0.0	0	0	1
10	SC	70	2.0	131	10.5	80	4	10	0.0	0	0	1
11	SC	70	2.0	131	10.5	80	4	11	0.0	0	0	1
12	SC	70	2.0	131	10.5	80	4	12	0.0	0	0	1
13	SC	70	2.0	131	10.5	80	4	13	0.0	0	0	1
14	SC	70	2.0	131	10.5	80	4	26	0.0	0	0	1
15	SC	70	2.0	131	10.5	80	4	29	0.0	0	0	1
17	SC	70	2.0	131	10.5	80	5	2	0.0	0	0	1
18	SC	70	2.0	131	10.5	80	5	3	0.0	0	0	1

BOTTLE /CTD DATA SET NUMBER:81-0001 YEAR: 1981

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO	DEPTH	
										(M)	(M)	
4017	14	70	13.8	138	44.0	81	3	26	18.7	415	406	-
4018	18	69	22.2	137	45.0	81	3	26	20.3	41	42	-
4019	78	69	53.0	135	54.5	81	3	26	21.4	18	19	-
4020	28	69	54.1	133	1.8	81	3	26	22.8	14	15	-
4021	24	71	4.5	134	48.0	81	3	27	18.1	500	492	-
4022	25	70	54.3	134	31.4	81	3	27	19.1	85	84	-
4023	204	71	8.0	133	44.5	81	3	27	20.2	463	459	-
4024	205	70	58.2	133	33.8	81	3	27	21.2	86	85	-
4025	206	70	64.8	133	15.2	81	3	27	22.1	63	63	-
4026	27	70	35.4	133	59.5	81	3	27	22.9	58	58	-
4027	67	71	5.3	129	4.2	81	3	29	18.6	43	45	-
4028	66	71	18.3	128	48.5	81	3	29	19.5	54	56	-
4029	65	71	32.5	128	20.0	81	3	29	20.4	219	216	-
4030	64	71	44.3	127	48.9	81	3	29	21.4	390	383	-
4031	98	72	16.7	126	4.8	81	3	29	22.6	21	22	-
4032	42	73	6.8	130	32.7	81	3	30	18.8	1045	2200	-
4033	41	73	30.9	132	29.0	81	3	30	20.1	1045	2500	-
4034	43	73	1.1	129	59.7	81	3	30	21.8	1045	1457	-
4035	48	72	39.4	125	32.1	81	3	30	23.4	17	17	-
4036	54	71	45.5	130	10.0	81	3	31	19.0	307	295	-
4037	55	71	36.2	130	.5	81	3	31	19.9	225	222	-
4038	56	71	25.7	129	51.9	81	3	31	19.8	77	76	-
4039	37	71	2.2	129	55.7	81	3	31	21.8	41	40	-
4040	38	70	30.3	129	32.7	81	3	31	22.7	17	18	-
4041	305	71	24.6	130	20.3	81	4	1	18.1	80	81	-
4042	34	71	35.2	131	5.5	81	4	1	19.1	626	629	-
4043	103	71	31.7	132	30.8	81	4	1	20.3	945	912	-
4044	104	71	22.5	132	17.0	81	4	1	21.4	470	464	-
4045	105	71	12.1	132	6.4	81	4	1	22.4	100	101	-
4046	106	71	0.0	131	53.9	81	4	1	23.3	60	61	-
4055	32	72	26.7	133	9.1	81	4	17	19.7	1040	1963	-
4056	101	72	3.8	132	47.3	81	4	17	21.6	1035	1615	-
4057	103	71	32.0	132	32.5	81	4	17	23.2	935	925	-
4058	105	71	11.0	132	6.8	81	4	18	.5	90	88	-
4059	204	71	6.3	133	46.5	81	4	18	1.5	315	311	-
4060	205	70	57.8	133	32.5	81	4	18	2.2	77	79	-
4000	22	71	42.4	136	2.8	81	3	18	19.1	1030	1960	-
4001	21	72	24.8	137	29.2	81	3	18	21.8	1020	2465	-
4002	31	73	1.2	134	50.2	81	3	20	19.3	1040	2623	-
4003	32	72	25.9	133	11.3	81	3	20	21.5	1030	1943	-
4004	33	71	44.0	131	29.9	81	3	21	18.5	980	980	-
4005	34	71	34.9	131	5.5	81	3	21	19.9	585	577	-
4006	35	71	23.9	130	42.5	81	3	21	21.1	187	180	-
4008	36	71	14.0	130	20.0	81	3	21	22.3	55	57	-
4009	51	71	25.8	129	48.4	81	3	21	23.6	57	56	-

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO (M)	DEPTH (M)	
4010	86	71	3.5	131	4.0	81	3	22	.7	55	56	-
4011	11	71	54.8	140	47.0	81	3	24	19.3	1040	2718	-
4012	12	71	6.0	139	46.3	81	3	24	21.2	1040	2123	-
4013	13	70	32.9	139	3.8	81	3	24	22.7	1045	1096	-
4014	23	71	13.1	135	4.3	81	3	25	.4	910	896	-
4015	26	70	45.0	134	13.2	81	3	25	1.8	64	64	-
4016	75	70	22.0	137	6.8	81	3	26	17.6	330	326	-

BOTTLE /CTD DATA SET NUMBER:81-0013 YEAR: 1981

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO (M)	DEPTH (M)	
5	5	69	27.6	133	1.7	81	6	22	4.5	10	0	11
9	3	69	27.0	133	.5	81	6	22	6.8	8	0	9
7	1	69	27.1	132	59.5	81	6	22	5.2	11	0	12
4	2	69	27.5	132	59.7	81	6	22	4.0	10	0	11
8	7	69	27.1	132	58.8	81	6	22	6.0	12	0	9
10	6	69	26.8	133	.5	81	6	22	7.2	1	0	1
27	5	69	27.6	133	1.7	81	7	4	13.2	10	0	10
12	4	69	27.1	133	1.2	81	7	3	23.2	11	0	12
13	3	69	27.0	133	.5	81	7	4	.5	6	0	6
15	6	69	26.8	133	.5	81	7	4	1.5	11	0	11
14	3A	69	27.2	133	.6	81	7	4	1.0	10	0	10
16	6A	69	27.0	133	0.0	81	7	4	1.8	10	0	9
17	1	69	27.1	132	59.5	81	7	4	3.0	9	0	10
20	2	69	27.5	132	59.7	81	7	4	5.5	9	0	10
19	7	69	27.1	132	58.8	81	7	4	4.8	11	0	12
18	8	69	26.7	132	59.3	81	7	4	3.8	9	0	10
21	4	69	27.1	133	1.2	81	7	4	6.8	11	0	12
22	3	69	27.0	133	.5	81	7	4	7.8	6	0	7
23	6A	69	27.0	133	0.0	81	7	4	9.0	8	0	9
24	1	69	27.1	132	59.5	81	7	4	10.8	9	0	10
26	2	69	27.5	132	59.7	81	7	4	12.5	9	0	10
25	7	69	27.1	132	58.8	81	7	4	11.5	11	0	12
28	5	69	27.6	133	1.7	81	7	7	1.8	10	0	11
29	4B	69	27.3	133	1.9	81	7	7	2.2	7	0	8
30	4A	69	27.2	133	1.5	81	7	7	2.5	13	0	14
31	4	69	27.1	133	1.2	81	7	7	3.2	10	0	10
33	3	69	27.0	133	.5	81	7	7	3.8	6	0	7
32	6	69	26.8	133	.5	81	7	7	3.5	2	0	3
34	3A	69	27.2	133	.6	81	7	7	4.2	13	0	14
35	6A	69	27.0	133	0.0	81	7	7	4.8	6	0	7

CON	STN	LAT		LON		DATE				CAST	WATER	PTS
		DEG	MIN	DEG	MIN	YR	MO	DY	HR	TO (M)	DEPTH (M)	
36	6B	69	27.3	132	59.9	81	7	7	5.0	3	0	4
37	2	69	27.5	132	59.7	81	7	7	5.5	10	0	11
38	1	69	27.1	132	59.5	81	7	7	6.0	9	0	10
39	7	69	27.1	132	58.8	81	7	7	6.8	11	0	12
40	4	69	27.1	133	1.2	81	7	7	14.8	11	0	12
43	4	69	27.1	133	1.2	81	7	7	17.2	11	0	12
44	3A	69	27.2	133	.6	81	7	7	17.8	12	0	12
45	1	69	27.1	132	59.5	81	7	7	18.2	10	0	10
46	7	69	27.1	132	58.8	81	7	7	18.8	11	0	11
1	1	69	27.1	132	59.5	81	6	21	21.0	10	0	12
2	1	69	27.1	132	59.5	81	6	21	23.8	10	0	12
3	1	69	27.1	132	59.5	81	6	22	2.0	10	0	12
6	1	69	27.1	132	59.5	81	6	22	5.0	10	0	12
11	1	69	27.1	132	59.5	81	6	22	8.2	10	0	11
41	3A	69	27.2	133	.6	81	7	7	15.8	13	0	14
44	3A	69	27.2	133	.6	81	7	7	17.8	12	0	12
47	3A	69	27.2	133	.6	81	7	7	21.8	13	0	14
50	3A	69	27.2	133	.6	81	7	7	23.5	15	0	16
53	3A	69	27.2	133	.6	81	7	8	1.2	14	0	15
45	1	69	27.1	132	59.5	81	7	7	18.2	10	0	10
48	1	69	27.1	132	59.5	81	7	7	22.2	10	0	11
51	1	69	27.1	132	59.5	81	7	8	0.0	11	0	12
54	1	69	27.1	132	59.5	81	7	8	1.8	11	0	12
42	7	69	27.1	132	58.8	81	7	7	16.5	10	0	10
46	7	69	27.1	132	58.8	81	7	7	18.8	11	0	11
49	7	69	27.1	132	58.8	81	7	7	22.8	12	0	13
52	7	69	27.1	132	58.8	81	7	8	.5	10	0	11
55	7	69	27.1	132	58.8	81	7	8	2.5	14	0	15

11.2 CURRENT METER DATA

The listing tabulates the records from individual meters within each data set. The following information is shown for each meter:

Column 1: **STN:** the originator's station name for the mooring.

Column 2: **LAT:** the latitude of the mooring in degrees and decimal minutes.

Column 3: **LON:** the longitude of the mooring in degrees and decimal minutes.

Column 4: **START:** gives the date on which data collection started as the last 2 digits of the year, the number of the month and the day of the month.

Column 5: **STOP:** gives the date on which data collection stopped, in the same format as START.

Column 6: **EFF LEN:** the number of days of data actually collected between START and STOP.

Column 7: **DT:** the interval in minutes between successive readings.

Column 8: **DEPTH:** lists the depth in metres of the current meter, followed by the total water depth in metres.

Column 9: **INST TYPE:** lists the type of current meter, using the following abbreviations:

AAND: Aanderaa RCM4 or RCM5.
CUSH: Cushing electromagnetic
ENDE: Endeco
HP : Hydro Products
M-M : Marsh-McBirney

Column 10: **ADDIT SENSOR:** an X appearing under the appropriate heading indicates that the meter was fitted with one or more of the following extra sensors:

P - pressure
T - temperature
C - conductivity.

CURRENT METER DATA SET NUMBER:70-0003 YEAR: 1970

STN	LAT		LON		START			STOP			EFF	DT	DEPTH		INST	ADDIT SENSOR		
	DEG	MIN	DEG	MIN	YR	MO	DY	YR	MO	DY	LEN	MN	INSTR	WATER	TYPE	P	T	C
1	69	39.5	133	40.0	70	7	16	70	7	17	2	60	1	6	HP			
2	69	51.7	134	22.7	70	7	24	70	7	25	2	60	1	9	HP			

CURRENT METER DATA SET NUMBER:74-0005 YEAR: 1974

STN	LAT		LON		START			STOP			EFF	DT	DEPTH		INST	ADDIT SENSOR		
	DEG	MIN	DEG	MIN	YR	MO	DY	YR	MO	DY	LEN	MN	INSTR	WATER	TYPE	P	T	C
4	69	41.9	137	9.2	74	5	8	74	6	29	53	30	40	43	AAND			
11	71	2.5	128	31.5	74	5	9	74	8	12	96	30	25	28	AAND		X	X

CURRENT METER DATA SET NUMBER:75-0007 YEAR: 1975

STN	LAT		LON		START			STOP			EFF	DT	DEPTH		INST	ADDIT SENSOR		
	DEG	MIN	DEG	MIN	YR	MO	DY	YR	MO	DY	LEN	MN	INSTR	WATER	TYPE	P	T	C
3	69	55.3	139	23.3	75	8	7	76	2	13	191	30	50	53	AAND		X	X
5	70	24.1	136	45.7	75	4	29	75	8	2	96	30	64	67	AAND		X	X
5	70	23.1	136	45.7	75	8	3	75	9	10	39	30	64	67	AAND		X	X
8	71	12.9	131	19.9	75	4	26	75	8	4	101	30	74	77	AAND		X	X
9	70	43.7	131	14.7	75	4	26	75	8	5	102	30	42	45	AAND		X	
10	71	18.6	128	54.5	75	4	25	75	8	4	102	30	53	56	AAND		X	X
11	71	.2	128	43.4	75	4	25	75	8	4	102	30	39	41	AAND			X
13	70	7.9	134	19.9	75	4	26	75	7	29	95	30	30	33	AAND		X	X
13	70	7.9	134	19.9	75	8	6	75	9	8	34	30	30	33	AAND		X	X
15	70	17.3	133	35.3	75	4	28	75	8	5	100	30	51	54	AAND		X	X

CURRENT METER DATA SET NUMBER:75-0007 YEAR: 1976

STN	LAT		LON		START			STOP			EFF	DT	DEPTH		INST	ADDIT SENSOR		
	DEG	MIN	DEG	MIN	YR	MO	DY	YR	MO	DY	LEN	MN	INSTR	WATER	TYPE	P	T	C
3	69	55.3	139	23.3	75	8	7	76	2	13	191	30	50	53	AAND		X	X

RRENT METER DATA SET NUMBER:76-0001 YEAR: 1976

TN	LAT		LON		START			STOP			EFF	DT	DEPTH		INST	ADDIT		
	DEG	MIN	DEG	MIN	YR	MO	DY	YR	MO	DY	LEN	MN	INSTR	WATER	TYPE	SENSOR		
																P	T	C
PN	70	22.9	135	5.6	76	8	17	76	9	25	14	60	3	57	HP			
PN	70	22.9	135	5.6	76	9	4	76	9	27	20	60	8	57	CUSH			
PN	70	23.0	135	5.6	76	8	29	76	9	25	10	60	54	57	HP			
NG	70	10.6	132	58.9	76	8	22	76	10	13	45	60	8	28	CUSH			
NG	70	10.6	132	58.9	76	8	22	76	10	13	51	60	26	28	HP			

RRENT METER DATA SET NUMBER:77-0004 YEAR: 1977

TN	LAT		LON		START			STOP			EFF	DT	DEPTH		INST	ADDIT		
	DEG	MIN	DEG	MIN	YR	MO	DY	YR	MO	DY	LEN	MN	INSTR	WATER	TYPE	SENSOR		
																P	T	C
NKT	70	28.6	136	16.9	77	8	4	77	8	28	16	60	3	64	CUSH			
NKT	70	28.6	136	16.9	77	8	31	77	10	12	30	60	10	64	HP			
NKT	70	28.6	136	16.9	77	7	31	77	10	12	70	60	62	64	HP			
KPN	70	22.9	135	5.6	77	9	11	77	9	27	7	60	3	57	CUSH			
KPN	70	22.9	135	5.6	77	7	28	77	9	28	61	60	10	57	HP			
KPN	70	22.9	135	5.6	77	8	4	77	9	30	57	60	50	57	HP			
UKL	70	9.1	132	43.1	77	8	2	77	9	7	33	60	3	29	CUSH			
UKL	70	9.1	132	43.1	77	7	22	77	10	2	67	60	10	29	HP			
KGL	70	34.1	130	51.2	77	7	26	77	7	28	2	60	3	27	CUSH			
KGL	70	34.1	130	51.2	77	7	26	77	7	28	2	60	24	27	HP			

URRENT METER DATA SET NUMBER:78-0001 YEAR: 1978

STN	LAT		LON		START			STOP			EFF	DT	DEPTH		INST	ADDIT		
	DEG	MIN	DEG	MIN	YR	MO	DY	YR	MO	DY	LEN	MN	INSTR	WATER	TYPE	SENSOR		
																P	T	C
NTK	69	45.6	139	44.6	78	7	16	78	8	3	14	60	12	34	HP			
KPN	70	22.9	135	5.6	78	7	24	78	9	23	51	60	12	57	HP			
TRT	69	55.0	136	20.2	78	8	21	78	9	1	11	60	12	23	HP			
NRL	70	27.8	133	29.7	78	8	8	78	8	10	3	60	12	47	HP			
UKL	70	9.1	132	43.8	78	7	15	78	9	25	70	60	12	29	HP			
KGL	70	34.1	130	51.3	78	7	19	78	8	5	7	60	12	27	HP			

```
-------------------------------------------------------------------------------------------------------

CURRENT METER DATA SET NUMBER:79-0003      YEAR: 1979

 STN     LAT       LON          START      STOP    EFF DT     DEPTH      INST AUDIT
     DEG MIN   DEG MIN     YR MO DY YR MO DY  LEN MN INSTR WATER  TYPE SENSO
                                                                       P T C

 NTK 69 45.4  139 44.6     79  8 21 79 10  7   30 60    12    34   M-M
 KPN 70 22.9  135  5.6     79  8 11 79  9 10   27 60    12    57    HP
 KPN 70 23.7  135 12.0     79 10 13 79 10 18    6 60    12    58    HP
 KNK 70 43.6  133 58.1     79  9 14 79 10 14    1 60    12    68    HP
 TRT 69 54.2  136 20.3     79  7 15 79 10 15   52 60    12    23    HP
 NRL 70 27.8  133 29.7     79  7 14 79 10 18   52 60    12    52    HP
 UKL 70  9.1  132 43.8     79  7 25 79  8  4   10 60    12    29    HP

-------------------------------------------------------------------------------------------------------

CURRENT METER DATA SET NUMBER:79-0004      YEAR: 1979

 STN     LAT       LON          START      STOP    EFF DT     DEPTH      INST AUDIT
     DEG MIN   DEG MIN     YR MO DY YR MO DY  LEN MN INSTR WATER  TYPE SENSO
                                                                       P T C

 CMB 70 49.1  131  1.8     79 11 27 79 11 30    4  1    20    48  AANU
 CMB 70 55.8  130 33.0     79 12  1 79 12  5    5  1    20    48  AANU
 CMB 70 36.4  132 23.4     79 12  6 79 12 10    5  1    20    48  AANU
 CMB 70 30.2  130 47.5     79 12 15 79 12 23    9  1    20    48  AANU

-------------------------------------------------------------------------------------------------------

CURRENT METER DATA SET NUMBER:81-0001      YEAR: 1981

 STN     LAT       LON          START      STOP    EFF DT     DEPTH      INST AUDIT
     DEG MIN   DEG MIN     YR MO DY YR MO DY  LEN MN INSTR WATER  TYPE SENSO
                                                                       P T C

   1 71 11.6  132  7.2     81  3 28 81  8 16   -9 30    29    99  AANU X X X
   1 71 11.6  132  7.2     81  3 28 81  8 16   -9 30    94    99  AANU   X X
   2 70 57.2  133 31.3     81  3 26 81  8 16   -9 30    39    78  AANU X X X
   2 70 57.2  133 31.3     81  3 26 81  8 16   -9 30    73    78  AANU   X X
   3 71 23.9  130 20.1     81  3 23 81  8 16   -9 30    35    60  AANU X X X
   3 71 23.9  130 20.1     81  3 23 81  8 16   -9 30    55    60  AANU   X X

-------------------------------------------------------------------------------------------------------
```

```
--------------------------------------------------------------------------

URRENT METER DATA SET NUMBER:81-0002     YEAR: 1981

STN    LAT      LON        START     STOP   EFF DT    DEPTH    INST ADDIT
    DEG MIN   DEG MIN    YR MO DY YR MO DY  LEN MN INSTR WATER TYPE SENSOR
                                                                    P T C

UVK 70 15.6  132 18.7    81  1 19 81  8  4  --9 30    19   25  AAND X X X
TRT 69 53.8  136 11.6    81  1 18 81  8  4   -9 30    19   25  AAND X X X

--------------------------------------------------------------------------

URRENT METER DATA SET NUMBER:81-0016     YEAR: 1981

STN    LAT      LON        START     STOP   EFF DT    DEPTH    INST ADDIT
    DEG MIN   DEG MIN    YR MO DY YR MO DY  LEN MN INSTR WATER TYPE SENSOR
                                                                    P T C

  A 69 59.0  134 21.0    81  8  8 81  9 19   43  5    15   16  AAND X X
  B 69 55.0  132 42.0    81  8  8 81  9 19   43  5    11   12  AAND X X
  C 69 48.3  131 59.8    81  8  8 81  9 25   49 30     5    8  ENDE

--------------------------------------------------------------------------
```

11.3 WATER LEVEL DATA

The listing tabulates the records from individual gauges within each data set. In the case of permanent tide gauge stations where gaps appear periodically in the record, a separate entry is made for each period during which the station operated. The following information is shown for each gauge:

Column 1: **STN:** the station name (the standard Hydrographic Service station number for gauges operated by the Canadian Hydrographic Service).

Column 2: **LAT:** the latitude of the gauge in degrees and decimal minutes.

Column 3: **LON:** the longitude of the gauge in degrees and decimal minutes.

Column 4: **START:** gives the date on which data collection started as the last 2 digits of the year, the number of the month and the day of the month.

Column 5: STOP: gives the date on which data collection stopped, in the same format as START.

Column 6: **EFF LEN:** the number of days of data actually recorded between START and STOP.

Column 7: DT: the interval in minutes between successive readings.

Column 8: **INST TYPE:** lists the type of gauge, using the following abbreviations:

AAND: Aanderaa
MECH: shore-based gauge, temporary or permanent
UBC : bottom pressure gauge built by University of B.C.

Column 9: **DEPTH:** lists the depth in metres of submerged gauges, followed by the total water depth in metres. (these entries are replaced by dashes (-) for shore-based gauges).

Column 10: **ADDIT SENSOR:** an X appearing under the appropriate heading indicates that the gauge was fitted with one or more of the following extra sensors:

T - temperature
C - conductivity

```
--------------------------------------------------------------------------------------------

WATER LEVEL DATA SET NUMBER:51-0004      YEAR: 1951

 STN    LAT        LON           START       STOP    EFF   DT      DEPTHS     INST  ADDIT
      DEG MIN   DEG MIN       YR MO DY YR MO DY LEN   MN INSTR WATER  TYPE  SENSO
                                                                              T C

6350  69 21. 0 124  4. 0  51  8 17 51 10 13  57  60    -      -    MECH

--------------------------------------------------------------------------------------------

WATER LEVEL DATA SET NUMBER:52-0004      YEAR: 1952

 STN    LAT        LON           START       STOP    EFF   DT      DEPTHS     INST  ADDIT
      DEG MIN   DEG MIN       YR MO DY YR MO DY LEN   MN INSTR WATER  TYPE  SENSO
                                                                              T C

6350  69 21. 0 124  4. 0  52  8  1 52 10 12  72  60    -      -    MECH

--------------------------------------------------------------------------------------------

WATER LEVEL DATA SET NUMBER:55-0001      YEAR: 1955

 STN    LAT        LON           START       STOP    EFF   DT      DEPTHS     INST  ADDIT
      DEG MIN   DEG MIN       YR MO DY YR MO DY LEN   MN INSTR WATER  TYPE  SENSO
                                                                              T C

6340  69 48.59 122 39.41  55  7 25 55  8 19  26  60    -      -    MECH

--------------------------------------------------------------------------------------------

WATER LEVEL DATA SET NUMBER:61-0002      YEAR: 1961

 STN    LAT        LON           START       STOP    EFF   DT      DEPTHS     INST  ADDIT
      DEG MIN   DEG MIN       YR MO DY YR MO DY LEN   MN INSTR WATER  TYPE  SENSO
                                                                              T C

6485  69 25. 0 132 58. 0  61  1  1 61 12  2 336  60    -      -    MECH
6485  69 25. 0 132 58. 0  61 12 13 62  5 16 155  60    -      -    MECH

--------------------------------------------------------------------------------------------

WATER LEVEL DATA SET NUMBER:61-0002      YEAR: 1962

 STN    LAT        LON           START       STOP    EFF   DT      DEPTHS     INST  ADDIT
      DEG MIN   DEG MIN       YR MO DY YR MO DY LEN   MN INSTR WATER  TYPE  SENSOR
                                                                              T C

6485  69 25. 0 132 58. 0  61 12 13 62  5 16 155  60    -      -    MECH
6485  69 25. 0 132 58. 0  62  5  8 62 12 31 238  60    -      -    MECH

--------------------------------------------------------------------------------------------
```

```
------------------------------------------------------------------------------------

WATER LEVEL DATA SET NUMBER:61-0002      YEAR: 1963

STN    LAT        LON          START        STOP    EFF   DT      DEPTHS     INST  ADDIT
    DEG MIN    DEG MIN      YR MO DY YR MO DY LEN   MN  INSTR WATER  TYPE  SENSOR
                                                                               T C

6485  69 25. 0 132 58. 0  63  1  1 63 12 31 365   60    -      -    MECH
------------------------------------------------------------------------------------

WATER LEVEL DATA SET NUMBER:61-0002      YEAR: 1964

STN    LAT        LON          START        STOP    EFF   DT      DEPTHS     INST  ADDIT
    DEG MIN    DEG MIN      YR MO DY YR MO DY LEN   MN  INSTR WATER  TYPE  SENSOR
                                                                               T C

485  69 25. 0 132 58. 0  64  1  1 64  8 30 243   60    -      -    MECH
485  69 25. 0 132 58. 0  64  9  7 64  9 15   9   60    -      -    MECH
485  69 25. 0 132 58. 0  64  9 21 65  8 31 345   60    -      -    MECH
------------------------------------------------------------------------------------

ATER LEVEL DATA SET NUMBER:64-0003      YEAR: 1964

STN    LAT        LON          START        STOP    EFF   DT      DEPTHS     INST  ADDIT
    DEG MIN    DEG MIN      YR MO DY YR MO DY LEN   MN  INSTR WATER  TYPE  SENSOR
                                                                               T C

498  69  0. 0 135  0. 0  64  7  6 64  9  1  56   60    -      -    MECH
------------------------------------------------------------------------------------

ATER LEVEL DATA SET NUMBER:61-0002      YEAR: 1965

STN    LAT        LON          START        STOP    EFF   DT      DEPTHS     INST  ADDIT
    DEG MIN    DEG MIN      YR MO DY YR MO DY LEN   MN  INSTR WATER  TYPE  SENSOR
                                                                               T C

485  69 25. 0 132 58. 0  64  9 21 65  8 31 345   60    -      -    MECH
485  69 25. 0 132 58. 0  65  9 30 66  6 29 273   60    =      -    MECH
------------------------------------------------------------------------------------
```

```
-----------------------------------------------------------------------------------------

WATER LEVEL DATA SET NUMBER:65-0001      YEAR: 1965

 STN    LAT        LON          START       STOP    EFF   DT     DEPTHS     INST ADDIT
     DEG MIN    DEG MIN     YR MO DY YR MO DY LEN   MN INSTR WATER TYPE SENSOR
                                                                              T C

6498  69  0. 0 135  0. 0  65  7  3 65  8 31  60  60    -      -    MECH

-----------------------------------------------------------------------------------------

WATER LEVEL DATA SET NUMBER:61-0002      YEAR: 1966

 STN    LAT        LON          START       STOP    EFF   DT     DEPTHS     INST ADDIT
     DEG MIN    DEG MIN     YR MO DY YR MO DY LEN   MN INSTR WATER TYPE SENSOR
                                                                              T C

6485  69 25. 0 132 58. 0  65  9 30 66  6 29 273  60    --     -    MECH
6485  69 25. 0 132 58. 0  66 11 16 66 12 30  45  60    -      -    MECH

-----------------------------------------------------------------------------------------

WATER LEVEL DATA SET NUMBER:66-0001      YEAR: 1966

 STN    LAT        LON          START       STOP    EFF   DT     DEPTHS     INST ADDIT
     DEG MIN    DEG MIN     YR MO DY YR MO DY LEN   MN INSTR WATER TYPE SENSOR
                                                                              T C

6360  70  8.96 124 40. 5  66  7 24 66 12 30 160  60    -      -    MECH

-----------------------------------------------------------------------------------------

WATER LEVEL DATA SET NUMBER:66-0002      YEAR: 1966

 STN    LAT        LON          START       STOP    EFF   DT     DEPTHS     INST ADDIT
     DEG MIN    DEG MIN     YR MO DY YR MO DY LEN   MN INSTR WATER TYPE SENSOR
                                                                              T C

6498  69  0. 0 135  0. 0  66  7  5 66  8 24  51  60    -      -    MECH

-----------------------------------------------------------------------------------------

WATER LEVEL DATA SET NUMBER:61-0002      YEAR: 1967

 STN    LAT        LON          START       STOP    EFF   DT     DEPTHS     INST ADDIT
     DEG MIN    DEG MIN     YR MO DY YR MO DY LEN   MN INSTR WATER TYPE SENSOR
                                                                              T C

6485  69 25. 0 132 58. 0  67  1  1 67  2 28  59  60    -      -    MECH
6485  69 25. 0 132 58. 0  67  3  9 68  2 27 356  60    -      -    MECH

-----------------------------------------------------------------------------------------
```

```
----------------------------------------------------------------------------------------------------

TER LEVEL DATA SET NUMBER:66-0001      YEAR: 1967

TN    LAT        LON           START       STOP     EFF   DT      DEPTHS      INST  ADDIT
   DEG MIN    DEG MIN      YR MO DY  YR MO DY  LEN   MN  INSTR  WATER  TYPE  SENSOR
                                                                                T  C

60   70   8.96 124 40. 5   67  1   1 67 12 31 365   60    -        -     MECH

----------------------------------------------------------------------------------------------------

TER LEVEL DATA SET NUMBER:61-0002      YEAR: 1968

TN    LAT        LON           START       STOP     EFF   DT      DEPTHS      INST  ADDIT
   DEG MIN    DEG MIN      YR MO DY  YR MO DY  LEN   MN  INSTR  WATER  TYPE  SENSOR
                                                                                T  C

85   69 25. 0 132 58. 0   67  3   9 68  2 27 356   60    -        -     MECH
85   69 25. 0 132 58. 0   68  8  17 69  4  8 235   60    -        -     MECH

----------------------------------------------------------------------------------------------------

TER LEVEL DATA SET NUMBER:66-0001      YEAR: 1968

TN    LAT        LON           START       STOP     EFF   DT      DEPTHS      INST  ADDIT
   DEG MIN    DEG MIN      YR MO DY  YR MO DY  LEN   MN  INSTR  WATER  TYPE  SENSOR
                                                                                T  C

60   70   8.96 124 40. 5   68  1   1 68 12 31 366   60    -        -     MECH

----------------------------------------------------------------------------------------------------

TER LEVEL DATA SET NUMBER:61-0002      YEAR: 1969

TN    LAT        LON           START       STOP     EFF   DT      DEPTHS      INST  ADDIT
   DEG MIN    DEG MIN      YR MO DY  YR MO DY  LEN   MN  INSTR  WATER  TYPE  SENSOR
                                                                                T  C

85   69 25. 0 132 58. 0   68  8  17 69  4  8 235   60    -        -     MECH
85   69 25. 0 132 58. 0   69  8   1 69 10 30  91   60    -        -     MECH

----------------------------------------------------------------------------------------------------

TER LEVEL DATA SET NUMBER:66-0001      YEAR: 1969

TN    LAT        LON           START       STOP     EFF   DT      DEPTHS      INST  ADDIT
   DEG MIN    DEG MIN      YR MO DY  YR MO DY  LEN   MN  INSTR  WATER  TYPE  SENSOR
                                                                                T  C

60   70   8.96 124 40. 5   69  1   1 69 12 31 365   60    -        -     MECH

----------------------------------------------------------------------------------------------------
```

```
----------------------------------------------------------------------------------------

WATER LEVEL DATA SET NUMBER:61-0002      YEAR: 1970

 STN    LAT         LON            START       STOP    EFF   DT      DEPTHS      INST ADDIT
      DEG MIN    DEG MIN        YR MO DY YR MO DY LEN   MN INSTR WATER TYPE SENSO
                                                                                  T C

6485  69 25. 0 132 58. 0  70  1 27 70  5 21 115  60    -      -   MECH
6485  69 25. 0 132 58. 0  70 11  9 71  4 29 172  60    -      -   MECH

----------------------------------------------------------------------------------------

WATER LEVEL DATA SET NUMBER:66-0001      YEAR: 1970

 STN    LAT         LON            START       STOP    EFF   DT      DEPTHS      INST ADDIT
      DEG MIN    DEG MIN        YR MO DY YR MO DY LEN   MN INSTR WATER TYPE SENSO
                                                                                  T C

6360  70  8.96 124 40. 5  70  1  1 70 12 31 365  60    -      -   MECH

----------------------------------------------------------------------------------------

WATER LEVEL DATA SET NUMBER:70-0004      YEAR: 1970

 STN    LAT         LON            START       STOP    EFF   DT      DEPTHS      INST ADDIT
      DEG MIN    DEG MIN        YR MO DY YR MO DY LEN   MN INSTR WATER TYPE SENSO
                                                                                  T C

6525  69 34.20 138 54. 0  70  8 10 70  9 10  30  60    -      -   MECH
6495  69 41. 0 134 50. 0  70  7 11 70  9  1  51  60    -      -   MECH
6367  69 59. 0 124  4. 0  70  7 22 70  8 20  30  60    -      -   MECH

----------------------------------------------------------------------------------------

WATER LEVEL DATA SET NUMBER:61-0002      YEAR: 1971

 STN    LAT         LON            START       STOP    EFF   DT      DEPTHS      INST ADDIT
      DEG MIN    DEG MIN        YR MO DY YR MO DY LEN   MN INSTR WATER TYPE SENSO
                                                                                  T C

6485  69 25. 0 132 58. 0  70 11  9 71  4 29 172  60    -      -   MECH
6485  69 25. 0 132 58. 0  71  7 12 72  3 12 245  60    -      -   MECH

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ATER LEVEL DATA SET NUMBER:66-0001      YEAR: 1971

STN    LAT        LON          START       STOP    EFF   DT      DEPTHS      INST  ADDIT
    DEG MIN    DEG MIN      YR MO DY YR MO DY LEN   MN  INSTR WATER  TYPE  SENSOR
                                                                              T C

360   70   8.96 124 40. 5   71   1   1 71   7   2 183   60     -       -    MECH
360   70   8.96 124 40. 5   71   7   8 71   8  22  46   60     -       -    MECH
360   70   8.96 124 40. 5   71   8  30 71  10  31  63   60     -       -    MECH

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ATER LEVEL DATA SET NUMBER:71-0002      YEAR: 1971

STN    LAT        LON          START       STOP    EFF   DT      DEPTHS      INST  ADDIT
    DEG MIN    DEG MIN      YR MO DY YR MO DY LEN   MN  INSTR WATER  TYPE  SENSOR
                                                                              T C

476   69 57. 0 131 28. 0   71   7   5 71   9   2  58   60     -       -    MECH

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ATER LEVEL DATA SET NUMBER:61-0002      YEAR: 1972

STN    LAT        LON          START       STOP    EFF   DT      DEPTHS      INST  ADDIT
    DEG MIN    DEG MIN      YR MO DY YR MO DY LEN   MN  INSTR WATER  TYPE  SENSOR
                                                                              T C

485   69 25. 0 132 58. 0   71   7  12 72   3  12 245   60     -       -    MECH
485   69 25. 0 132 48. 0   72   7  13 72   7  24  12   60     -       -    MECH
485   69 25. 0 132 58. 0   72   8   7 72   8  26  20   60     -       -    MECH

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ATER LEVEL DATA SET NUMBER:66-0001      YEAR: 1972

STN    LAT        LON          START       STOP    EFF   DT      DEPTHS      INST  ADDIT
    DEG MIN    DEG MIN      YR MO DY YR MO DY LEN   MN  INSTR WATER  TYPE  SENSOR
                                                                              T C

360   70   8.96 124 40. 5   72   2  29 72   3   1   2   60     -       -    MECH
360   70   8.96 124 40. 5   72   5  13 73   1  28 261   60     -       -    MECH

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WATER LEVEL DATA SET NUMBER:72-0009 YEAR: 1972

STN	LAT		LON		START			STOP			EFF	DT	DEPTHS		INST	ADDIT	
	DEG	MIN	DEG	MIN	YR	MO	DY	YR	MO	DY	LEN	MN	INSTR	WATER	TYPE	SENSOR T	C
6424	71	58. 0	125	15. 0	72	1	1	72	6	27	179	60	-	-	MECH		
6424	71	58. 0	125	15. 0	72	11	9	73	1	8	61	60	-	-	MECH		

WATER LEVEL DATA SET NUMBER:72-0010 YEAR: 1972

STN	LAT		LON		START			STOP			EFF	DT	DEPTHS		INST	ADDIT	
	DEG	MIN	DEG	MIN	YR	MO	DY	YR	MO	DY	LEN	MN	INSTR	WATER	TYPE	SENSOR T	C
6497	69	0. 0	135	0. 0	72	7	25	72	8	18	25	60	-	-	MECH		
6476	69	57. 0	131	28. 0	72	8	7	72	8	10	4	60	-	-	MECH		
6476	69	57. 0	131	28. 0	72	8	14	72	9	1	17	60	-	-	MECH		
6472	70	0. 0	129	0. 0	72	8	3	72	9	1	28	60	-	-	MECH		
6442	70	33. 0	128	8. 0	72	9	10	72	10	2	21	60	-	-	MECH		

WATER LEVEL DATA SET NUMBER:61-0002 YEAR: 1973

STN	LAT		LON		START			STOP			EFF	DT	DEPTHS		INST	ADDIT	
	DEG	MIN	DEG	MIN	YR	MO	DY	YR	MO	DY	LEN	MN	INSTR	WATER	TYPE	SENSOR T	C
6485	69	25. 0	132	58. 0	73	1	1	73	7	6	187	60	-	-	MECH		
6485	69	25. 0	132	58. 0	73	8	3	74	1	19	170	60	-	-	MECH		

WATER LEVEL DATA SET NUMBER:66-0001 YEAR: 1973

STN	LAT		LON		START			STOP			EFF	DT	DEPTHS		INST	ADDIT	
	DEG	MIN	DEG	MIN	YR	MO	DY	YR	MO	DY	LEN	MN	INSTR	WATER	TYPE	SENSOR T	C
6360	70	8.96	124	40. 5	72	5	13	73	1	28	261	60	-	-	MECH		
6360	70	8.96	124	40. 5	73	3	21	73	6	13	85	60	-	-	MECH		
6360	70	8.96	124	40. 5	73	5	14	73	8	15	94	60	-	-	MECH		
6360	70	8.96	124	40. 5	73	11	5	74	2	16	104	60	-	-	MECH		

ATER LEVEL DATA SET NUMBER:72-0009 YEAR: 1973

STN	LAT		LON		START			STOP			EFF	DT	DEPTHS		INST	ADDIT	
	DEG	MIN	DEG	MIN	YR	MO	DY	YR	MO	DY	LEN	MN	INSTR	WATER	TYPE	SENSOR	
																T	C
424	71	58. 0	125	15. 0	72	11	9	73	1	8	61	60	-	-	MECH		
424	71	58. 0	125	15. 0	73	1	12	73	5	2	111	60	-	-	MECH		
424	71	58. 0	125	15. 0	73	5	23	73	5	24	2	60	-	-	MECH		
424	71	58. 0	125	15. 0	73	5	27	73	6	15	20	60	-	-	MECH		
424	71	58. 0	125	15. 0	73	7	7	74	6	21	350	60	-	-	MECH		

ATER LEVEL DATA SET NUMBER:73-0004 YEAR: 1973

STN	LAT		LON		START			STOP			EFF	DT	DEPTHS		INST	ADDIT	
	DEG	MIN	DEG	MIN	YR	MO	DY	YR	MO	DY	LEN	MN	INSTR	WATER	TYPE	SENSOR	
																T	C
445	70	31. 0	128	21. 0	73	7	0	73	7	29	30	60	-	-	MECH	X	X
385	70	2.27	117	19.30	73	7	15	73	7	31	17	60	-	-	MECH		
340	69	48.59	122	39.41	73	7	25	73	9	9	47	60	-	-	MECH		
338	69	37. 0	120	47. 0	73	8	16	73	9	10	26	60	-	-	MECH		

ATER LEVEL DATA SET NUMBER:73-0004 YEAR: 1973

STN	LAT		LON		START			STOP			EFF	DT	DEPTHS		INST	ADDIT	
	DEG	MIN	DEG	MIN	YR	MO	DY	YR	MO	DY	LEN	MN	INSTR	WATER	TYPE	SENSOR	
																T	C
525	69	34.20	138	54.70	73	9	26	74	8	1	309	30	-	-	AAND		

ATER LEVEL DATA SET NUMBER:73-0004 YEAR: 1974

STN	LAT		LON		START			STOP			EFF	DT	DEPTHS		INST	ADDIT	
	DEG	MIN	DEG	MIN	YR	MO	DY	YR	MO	DY	LEN	MN	INSTR	WATER	TYPE	SENSOR	
																T	C
525	69	34.20	138	54.70	73	9	26	74	8	1	309	30	-	-	AAND		

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WATER LEVEL DATA SET NUMBER:61-0002     YEAR: 1974

 STN   LAT      LON        START     STOP   EFF  DT    DEPTHS   INST ADDIT
     DEG MIN   DEG MIN    YR MO DY YR MO DY LEN  MN INSTR WATER TYPE SENSOR
                                                                      T C

6485  69 25. 0 132 58. 0  73  8  3 74  1 19 170  60   -     -   MECH
6485  69 25. 0 132 58. 0  74  2 10 74  4 25  75  60   -     -   MECH
6485  69 25. 0 132 58. 0  74  5  2 74  6  1  31  60   -     -   MECH
6485  69 25. 0 132 58. 0  74  7 27 75  1 26 184  60   -     -   MECH
6485  69 25. 0 132 58. 0  74  7 27 75  1 26 184  60   -     -   MECH

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WATER LEVEL DATA SET NUMBER:66-0001     YEAR: 1974

 STN   LAT      LON        START     STOP   EFF  DT    DEPTHS   INST ADDIT
     DEG MIN   DEG MIN    YR MO DY YR MO DY LEN  MN INSTR WATER TYPE SENSOR
                                                                      T C

6360  70  8.96 124 40. 5  73 11  5 74  2 16 104  60   -     -   MECH
6360  70  8.96 124 40. 5  74  7 13 74  9  6  56  60   -     -   MECH
6360  70  8.96 124 40. 5  74 10 12 74 11  4  24  60   -     -   MECH
6360  70  8.96 124 40. 5  74  7 13 74  9  6  56  60   -     -   MECH
6360  70  8.96 124 40. 5  74 10 12 74 11  4  24  60   -     -   MECH
6360  70  8.96 124 40. 5  74 12 28 75  3 26  89  60   -     -   MECH

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WATER LEVEL DATA SET NUMBER:72-0009     YEAR: 1974

 STN   LAT      LON        START     STOP   EFF  DT    DEPTHS   INST ADDIT
     DEG MIN   DEG MIN    YR MO DY YR MO DY LEN  MN INSTR WATER TYPE SENSOR
                                                                      T C

6424  71 58. 0 125 15. 0  73  7  7 74  6 21 350  60   -     -   MECH
6424  71 58. 0 125 15. 0  74  7  7 74 12 29 176  60   -     -   MECH
6424  71 58. 0 125 15. 0  74  7  7 74 12 29 176  60   -     -   MECH

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WATER LEVEL DATA SET NUMBER:74-0006     YEAR: 1974

 STN   LAT      LON        START     STOP   EFF  DT    DEPTHS   INST ADDIT
     DEG MIN   DEG MIN    YR MO DY YR MO DY LEN  MN INSTR WATER TYPE SENSOR
                                                                      T C

6525  69 34.20 138 54.70  74  8  2 74 11 23 106  30   -     -   AAND
   4  69 41.90 132  9.20  74  5  8 74  7  2  45  30  41    43   AAND


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TER LEVEL DATA SET NUMBER:74-0006      YEAR: 1974

TN    LAT         LON          START       STOP     EFF   DT      DEPTHS      INST ADDIT
    DEG MIN    DEG MIN      YR MO DY YR MO DY  LEN   MN  INSTR WATER TYPE SENSOR
                                                                              T C

76   69 57. 0 131 28. 0    74  7 27 74 10  1   62   60    -      -    MECH
45   70 31. 0 128 21. 0    74  7  0 74  7 29   30   60    -      -    MECH   X X
92   69 32.30 135  6. 0    74  8 28 74  9 30   29   60    -      -    MECH
05   68 59. 0 137 27. 0    74  7 14 74  8  2   14   60    -      -    MECH
05   68 59. 0 137 27. 0    74  8  2 74  8 24   17   60    -      -    MECH
15   69 16.80 138 25.80    74  7 14 74  7 25    5   60    -      -    MECH
15   69 16.80 138 25.80    74  8  6 74  9  9   28   60    -      -    MECH
15   69 16.80 138 25.80    74  9  9 74  9 28   12   60    -      -    MECH
25   69 34.20 138 54.70    74  8  2 74 11 23  106   30    -      -    AAND
76   69 57. 0 131 28. 0    74  7 27 74 10  1   62   60    -      -    MECH   X X
45   70 31. 0 128 21. 0    74  7  0 74  7 29   30   60    -      -    MECH
92   69 32.30 135  6. 0    74  8 28 74  9 30   29   60    -      -    MECH
05   68 59. 0 137 27. 0    74  7 14 74  8  2   14   60    -      -    MECH
05   68 59. 0 137 27. 0    74  8  2 74  8 24   17   60    -      -    MECH
15   69 16.80 138 25.80    74  7 14 74  7 25    5   60    -      -    MECH
15   69 16.80 138 25.80    74  8  6 74  9  9   28   60    -      -    MECH
15   69 16.80 138 25.80    74  9  9 74  9 28   12   60    -      -    MECH

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TER LEVEL DATA SET NUMBER:61-0002      YEAR: 1975

TN    LAT         LON          START       STOP     EFF   DT      DEPTHS      INST ADDIT
    DEG MIN    DEG MIN      YR MO DY YR MO DY  LEN   MN  INSTR WATER TYPE SENSOR
                                                                              T C

85   69 25. 0 132 58. 0    74  7 27 75  1 26  184   60    -      -    MECH
85   69 25. 0 132 58. 0    74  7 27 75  1 26  184   60    -      -    MECH
85   69 25. 0 132 58. 0    75  2 20 75  6 13  114   60    -      -    MECH
85   69 25. 0 132 58. 0    75  7  6 75  7 30   25   60    -      -    MECH
85   69 25. 0 132 58. 0    75  8  2 75 11 28  119   60    -      -    MECH

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TER LEVEL DATA SET NUMBER:66-0001      YEAR: 1975

TN    LAT         LON          START       STOP     EFF   DT      DEPTHS      INST ADDIT
    DEG MIN    DEG MIN      YR MO DY YR MO DY  LEN   MN  INSTR WATER TYPE SENSOR
                                                                              T C

60   70  8.96 124 40. 5    74 12 28 75  3 26   89   60    -      -    MECH
60   70  8.96 124 40. 5    75  4  1 75  4 13   13   60    -      -    MECH
60   70  8.96 124 40. 5    75  4 14 75  4 26   13   60    -      -    MECH
60   70  8.96 124 40. 5    75  5  1 75  6 25   56   60    -      -    MECH
60   70  8.96 124 40. 5    75  7 24 75  9  8   47   60    -      -    MECH
40   70  8.96 124 40. 5    75 12 11 75 12 15    5   60    -      -    MECH

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WATER LEVEL DATA SET NUMBER:72-0009      YEAR: 1975

 STN    LAT       LON          START       STOP     EFF   DT      DEPTHS     INST  ADDIT
     DEG MIN   DEG MIN      YR MO DY  YR MO DY  LEN   MN  INSTR  WATER  TYPE  SENSOR
                                                                              T C

6424   71 58. 0 125 15. 0   75  1  7  75  2  2   27   60    -      -    MECH
6424   71 58. 0 125 15. 0   75  2  9  75  3 21   41   60    -      -    MECH
6424   71 58. 0 125 15. 0   75  3 24  75  5 16   54   60    -      -    MECH
6424   71 58. 0 125 15. 0   75  5 20  75  5 25    6   60    -      -    MECH
6424   71 58. 0 125 15. 0   75  6  6  75  9 19  106   60    -      -    MECH
6424   71 58. 0 125 15. 0   75 10 10  75 11  7   29   60    -      -    MECH
6424   71 58. 0 125 15. 0   75 11 10  75 11 28   19   60    -      -    MECH  X X
6424   71 58. 0 125 15. 0   75 12  3  76  2  8   68   60    -      -    MECH

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WATER LEVEL DATA SET NUMBER:75-0007      YEAR: 1975

 STN    LAT       LON          START       STOP     EFF   DT      DEPTHS     INST  ADDIT
     DEG MIN   DEG MIN      YR MO DY  YR MO DY  LEN   MN  INSTR  WATER  TYPE  SENSOR
                                                                              T C

6525   69 34.20 138 54.70   75  7 13  75  9  7   47   10    -      -    AAND
6488   69 25.20 133 52. 0   75  7 31  76  5  4  269   60    -      -    AAND
6503   68 46.20 135 43.20   75  7 31  75 12 18  133   30    -      -    AAND
6530   69 40.90 141 13.30   75  8 28  75  9 17   17   30    -      -    AAND
   5   70 24.10 136 45.70   75  4 29  75  8 10   95   15   65     67    AAND
   8   71 12.90 131 19.90   75  4 26  75  8 10  100   15   75     77    AAND  X
   9   70 43.70 131 14.70   75  4 26  75  8 11  101   15   43     45    AAND  X
  10   71 18.60 128 54.50   75  4 25  75  8 12  101   30   54     56    AAND  X
  11   71  0.20 128 43.40   75  4 25  75  8 12  101   15   40     41    AAND  X
   5   70 24.10 136 45.70   75  8  3  75  9 19   38   15   65     67    AAND  X
  13   70  7.90 134 19.90   75  8  6  75  9 17   33   15   31     33     UBC  X

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WATER LEVEL DATA SET NUMBER:75-0008      YEAR: 1975

 STN    LAT       LON          START       STOP     EFF   DT      DEPTHS     INST  ADDIT
     DEG MIN   DEG MIN      YR MO DY  YR MO DY  LEN   MN  INSTR  WATER  TYPE  SENSOR
                                                                              T C

       69 26. 0 133  2. 0   75  7 15  75  9 17   65   60    -      -    MECH
6476   69 56.70 131 24.60   75  7 10  75  9 18   65   60    -      -    MECH
6445   70 31.30 128 21.20   75  9  1  75  9 18   12   60    -      -    MECH
6447   70 14.30 127 38.50   75  7 22  75  9 14   53   60    -      -    MECH
6499   69 26.80 135 36.20   75  7 14  75  8 25   41   60    -      -    MECH
6515   69 16.80 138 25.80   75  6 23  75  7 15   12   60    -      -    MECH
6515   69 16.80 138 25.80   75  7 11  75  9 19   62   60    -      -    MECH

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WATER LEVEL DATA SET NUMBER:75-0007 YEAR: 1976

STN	LAT		LON		START			STOP			EFF	DT	DEPTHS		INST	ADDIT SENSOR	
	DEG	MIN	DEG	MIN	YR	MO	DY	YR	MO	DY	LEN	MN	INSTR	WATER	TYPE	T	C
488	69	25.20	133	52. 0	75	7	31	76	5	4	269	60	-	-	AAND		
315	68	54. 0	116	51. 0	76	7	30	76	9	9	42	60	-	-	AAND		

WATER LEVEL DATA SET NUMBER:61-0002 YEAR: 1976

STN	LAT		LON		START			STOP			EFF	DT	DEPTHS		INST	ADDIT SENSOR	
	DEG	MIN	DEG	MIN	YR	MO	DY	YR	MO	DY	LEN	MN	INSTR	WATER	TYPE	T	C
485	69	25. 0	132	58. 0	76	1	1	76	1	2	2	60	-	-	MECH		
485	69	25. 0	132	58. 0	76	1	5	76	2	29	56	60	-	-	MECH		
485	69	25. 0	132	58. 0	76	3	4	76	6	21	110	60	-	-	MECH		
485	69	25. 0	132	58. 0	76	5	23	76	6	18	27	60	-	-	MECH		
485	69	25. 0	132	58. 0	76	9	2	76	12	30	120	60	-	-	MECH		

WATER LEVEL DATA SET NUMBER:66-0001 YEAR: 1976

STN	LAT		LON		START			STOP			EFF	DT	DEPTHS		INST	ADDIT SENSOR	
	DEG	MIN	DEG	MIN	YR	MO	DY	YR	MO	DY	LEN	MN	INSTR	WATER	TYPE	T	C
360	70	8.96	124	40. 5	76	4	11	76	5	6	26	60	-	-	MECH		
360	70	8.96	124	40. 5	76	5	13	76	5	17	5	60	-	-	MECH		
360	70	8.96	124	40. 5	76	5	23	76	6	13	22	60	-	-	MECH		
360	70	8.96	124	40. 5	76	7	22	76	8	20	30	60	-	-	MECH		
360	70	8.96	124	40. 5	76	8	25	76	9	16	23	60	-	-	MECH		

WATER LEVEL DATA SET NUMBER:722-000 YEAR: 1976

STN	LAT		LON		START			STOP			EFF	DT	DEPTHS		INST	ADDIT SENSOR	
	DEG	MIN	DEG	MIN	YR	MO	DY	YR	MO	DY	LEN	MN	INSTR	WATER	TYPE	T	C
424	71	58. 0	125	15. 0	75	12	3	76	2	8	68	60	-	-	MECH		
424	71	58. 0	125	15. 0	76	2	13	76	2	18	6	60	-	-	MECH		
424	71	58. 0	125	15. 0	76	2	20	76	3	20	30	60	-	-	MECH		
424	71	58. 0	125	15. 0	76	3	28	76	4	6	10	60	-	-	MECH		
424	71	58. 0	125	15. 0	76	5	11	76	5	31	21	60	-	-	MECH		
424	71	58. 0	125	15. 0	76	5	4	76	7	25	83	60	-	-	MECH		
424	71	58. 0	125	15. 0	76	9	6	76	11	22	78	60	-	-	MECH		
424	71	58. 0	125	15. 0	76	11	25	76	12	19	25	60	-	-	MECH		

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WATER LEVEL DATA SET NUMBER:76-0002      YEAR: 1976

 STN    LAT       LON          START       STOP    EFF  DT     DEPTHS     INST ADDIT
     DEG MIN   DEG MIN      YR MO DY YR MO DY LEN  MN INSTR WATER TYPE SENSO
                                                                        T C

6445  70 31. 0 128 31. 0  76  7 31 76  8 27  28  60   -      -   MECH
6499  69 26. 0 135 36. 0  76  7  7 76  9  2  58  60   -      -   MECH
6436  72 36. 0 125  8. 0  76  7 31 76  9 15  40  60   -      -   MECH
6420  71 32. 0 123 48. 0  76  7 31 76  9 14  40  60   -      -   MECH
6457  69 32. 0 130 66. 0  76  7 10 76  9  6  59  60   -      -   MECH
      69 23. 0 132  3. 0  76  7 10 76  9  6  59  60   -      -   MECH
      69  8. 0 132 28. 0  76  7 10 76  9  6  59  60   -      -   MECH
      68 57. 0 132 54. 0  76  7 10 76  9  6  59  60   -      -   MECH
      69 17. 0 134  7. 0  76  7 19 76  9  9  53  60   -      -   MECH
      69  0. 0 134 40. 0  76  7 19 76  9  9  53  60   -      -   MECH
      69 13. 0 135  6. 0  76  7 19 76  9  9  53  60   -      -   MECH
      69 26. 0 133  2. 0  76  7 15 76  9  9  57  60   -      -   MECH

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WATER LEVEL DATA SET NUMBER:61-0002      YEAR: 1977

 STN    LAT       LON          START       STOP    EFF  DT     DEPTHS     INST ADDIT
     DEG MIN   DEG MIN      YR MO DY YR MO DY LEN  MN INSTR WATER TYPE SENSO
                                                                        T C

6485  69 25. 0 132 58. 0  77  2  8 77  5 31 113  60   -      -   MECH
6485  69 25. 0 132 58. 0  77  7  4 77  7 13  10  60   -      -   MECH

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WATER LEVEL DATA SET NUMBER:66-0001      YEAR: 1977

 STN    LAT       LON          START       STOP    EFF  DT     DEPTHS     INST ADDIT
     DEG MIN   DEG MIN      YR MO DY YR MO DY LEN  MN INSTR WATER TYPE SENSO
                                                                        T C

6360  70  8.96 124 40. 5  77  5 24 77  6 26  34  60   -      -   MECH
6360  70  8.96 124 40. 5  77  7  5 77  9  5  63  60   -      -   MECH
6360  70  8.96 124 49.95  77  9 13 77 10 12  30  60   -      -   MECH

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WATER LEVEL DATA SET NUMBER:72-0009     YEAR: 1977

 STN   LAT        LON          START       STOP     EFF   DT      DEPTHS     INST ADDIT
     DEG MIN    DEG MIN      YR MO DY YR MO DY LEN   MN INSTR WATER  TYPE SENSOR
                                                                            T C

6424  71 58. 0 125 15. 0   77  3 21 77  4  5  16   60   -      -    MECH
6424  71 58. 0 125 15. 0   77  4 10 77  5  3  24   60   -      -    MECH
6424  71 58. 0 125 15. 0   77  5 17 77  6  6  21   60   -      -    MECH
6424  71 58. 0 125 15. 0   77  7  5 77  8 10  37   60   -      -    MECH
6424  71 58. 0 125 15. 0   77  8 23 77  9  3  12   60   -      -    MECH
6424  71 58. 0 125 15. 0   77  9 13 77 10 12  30   60   -      -    MECH

-----------------------------------------------------------------------------------------

WATER LEVEL DATA SET NUMBER:77-0005     YEAR: 1977

 STN   LAT        LON          START       STOP     EFF   DT      DEPTHS     INST ADDIT
     DEG MIN    DEG MIN      YR MO DY YR MO DY LEN   MN INSTR WATER  TYPE SENSOR
                                                                            T C

      69 26. 0 133  2. 0   77  7 31 77  9 10  42   60   -      -    MECH
6445  70 31. 0 128 31. 0   77  7 24 77  9  8  47   60   -      -    MECH
6499  69 26. 0 135 36. 0   77  7  5 77  9  8  66   60   -      -    MECH

-----------------------------------------------------------------------------------------

WATER LEVEL DATA SET NUMBER:61-0002     YEAR: 1978

 STN   LAT        LON          START       STOP     EFF   DT      DEPTHS     INST ADDIT
     DEG MIN    DEG MIN      YR MO DY YR MO DY LEN   MN INSTR WATER  TYPE SENSOR
                                                                            T C

6485  69 25. 0 132 58. 0   78  2 14 78  6 30 137   60   -      -    MECH
6485  69 25. 0 132 58. 0   78  7  5 78  8  4  31   60   -      -    MECH
6485  69 25. 0 132 58. 0   78  8  6 78 10 14  70   60   -      -    MECH

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WATER LEVEL DATA SET NUMBER:66-0001     YEAR: 1978

 STN   LAT        LON          START       STOP     EFF   DT      DEPTHS     INST ADDIT
     DEG MIN    DEG MIN      YR MO DY YR MO DY LEN   MN INSTR WATER  TYPE SENSOR
                                                                            T C

6360  70  8.96 124 40. 5   78  2 12 78  4  4  52   60   -      -    MECH
6360  70  8.96 124 40. 5   78  5 12 78  6  1  21   60   -      -    MECH
6360  70  8.96 124 40. 5   78  7  9 78  9 13  67   60   -      -    MECH

-----------------------------------------------------------------------------------------
```

WATER LEVEL DATA SET NUMBER:72-0009 YEAR: 1978

STN	LAT		LON		START			STOP			EFF	DT	DEPTHS		INST	ADDIT SENSOR	
	DEG	MIN	DEG	MIN	YR	MO	DY	YR	MO	DY	LEN	MN	INSTR	WATER	TYPE	T	C
6424	71	58. 0	125	15. 0	78	1	1	78	6	10	161	60	-	-	MECH		

WATER LEVEL DATA SET NUMBER:61-0002 YEAR: 1979

STN	LAT		LON		START			STOP			EFF	DT	DEPTHS		INST	ADDIT SENSOR	
	DEG	MIN	DEG	MIN	YR	MO	DY	YR	MO	DY	LEN	MN	INSTR	WATER	TYPE	T	C
6485	69	25. 0	132	58. 0	79	1	1	79	2	27	58	60	-	-	MECH		
6485	69	25. 0	132	58. 0	79	3	14	79	4	1	19	60	-	-	MECH		
6485	69	25. 0	132	58. 0	79	4	13	79	6	19	68	60	-	-	MECH		
6485	69	25. 0	132	58. 0	79	5	21	79	6	29	40	60	-	-	MECH		
6485	69	25. 0	132	58. 0	79	8	23	79	8	30	8	60	-	-	MECH		

WATER LEVEL DATA SET NUMBER:66-0001 YEAR: 1979

STN	LAT		LON		START			STOP			EFF	DT	DEPTHS		INST	ADDIT SENSOR	
	DEG	MIN	DEG	MIN	YR	MO	DY	YR	MO	DY	LEN	MN	INSTR	WATER	TYPE	T	C
6360	70	8.96	124	40. 5	79	1	1	79	2	6	37	60	-	-	MECH		
6360	70	8.96	124	40. 5	79	3	7	79	7	18	134	60	-	-	MECH		
6360	70	8.96	124	40. 5	79	8	10	79	8	27	18	60	-	-	MECH		

WATER LEVEL DATA SET NUMBER:72-0009 YEAR: 1979

STN	LAT		LON		START			STOP			EFF	DT	DEPTHS		INST	ADDIT SENSOR	
	DEG	MIN	DEG	MIN	YR	MO	DY	YR	MO	DY	LEN	MN	INSTR	WATER	TYPE	T	C
6424	71	58. 0	125	15. 0	79	1	22	79	2	10	20	60	-	-	MECH		
6424	71	58. 0	125	15. 0	79	2	13	79	2	23	11	60	-	-	MECH		
6424	71	58. 0	125	15. 0	79	3	14	79	7	7	116	60	-	-	MECH		
6424	71	58. 0	125	15. 0	79	7	9	79	9	6	60	60	-	-	MECH		
6424	71	58. 0	125	15. 0	79	9	16	79	9	24	9	60	-	-	MECH		

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ATER LEVEL DATA SET NUMBER:61-0002      YEAR: 1980

 STN    LAT        LON           START        STOP     EFF   DT      DEPTHS      INST  ADDIT
     DEG MIN    DEG MIN      YR MO DY  YR MO DY  LEN   MN  INSTR  WATER  TYPE  SENSOR
                                                                                       T  C

485   69 25. 0 132 58. 0    80   9   4 80 11   2   60   60    -        -    MECH

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ATER LEVEL DATA SET NUMBER:66-0001      YEAR: 1980

 STN    LAT        LON           START        STOP     EFF   DT      DEPTHS      INST  ADDIT
     DEG MIN    DEG MIN      YR MO DY  YR MO DY  LEN   MN  INSTR  WATER  TYPE  SENSOR
                                                                                       T  C

360   70   8.96 124 40. 5    80   1   1 80   1 15   15   60    -        -    MECH
360   70   8.96 124 40. 5    80   1 14 80   2 17   35   60    -        -    MECH
360   70   8.96 124 40. 5    80   6 25 80 11   6 135   60    -        -    MECH
360   70   8.96 124 40. 5    80   9   5 80 11 18   75   60    -        -    MECH
360   70   8.96 124 40. 5    80 11   1 81   3 30 150   60    -        -    MECH

--------------------------------------------------------------------------------------------

ATER LEVEL DATA SET NUMBER:72-0009      YEAR: 1980

STN    LAT        LON           START        STOP     EFF   DT      DEPTHS      INST  ADDIT
     DEG MIN    DEG MIN      YR MO DY  YR MO DY  LEN   MN  INSTR  WATER  TYPE  SENSOR
                                                                                       T  C

424   71 58. 0 125 15. 0    80   1 31 80   3 13   42   60    -        -    MECH
424   71 58. 0 175 15. 0    80   3 27 80   9 22 180   60    -        -    MECH
424   71 58. 0 125 15. 0    80   6   9 80   6 21   12   60    -        -    MECH
424   71 58. 0 125 15. 0    80   6 30 80 11   1 125   60    -        -    MECH
424   71 58. 0 125 15. 0    80   9   5 80 12   3   90   60    -        -    MECH
424   71 58. 0 125 15. 0    80 12   9 81   2   4   57   60    -        -    MECH

--------------------------------------------------------------------------------------------

ATER LEVEL DATA SET NUMBER:61-0002      YEAR: 1981

STN    LAT        LON           START        STOP     EFF   DT      DEPTHS      INST  ADDIT
     DEG MIN    DEG MIN      YR MO DY  YR MO DY  LEN   MN  INSTR  WATER  TYPE  SENSOR
                                                                                       T  C

85   69 25. 0 132 58. 0    81   2   6 81   6 20 135   60    -        -    MECH

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WATER LEVEL DATA SET NUMBER:66-0001      YEAR: 1981

 STN    LAT        LON           START       STOP    EFF   DT      DEPTHS      INST  ADDIT
      DEG MIN    DEG MIN     YR MO DY YR MO DY LEN   MN  INSTR WATER  TYPE  SENSOR
                                                                                  T C

6360  70   8.96 124 40. 5  80 11   1 81   3 30 150   60     -       -    MECH
6360  70   8.96 124 40. 6  81  2   9 81 10 26 260   60     -       -    MECH

--------------------------------------------------------------------------------------------

WATER LEVEL DATA SET NUMBER:72-0009      YEAR: 1981

 STN    LAT        LON           START       STOP    EFF   DT      DEPTHS      INST  ADDIT
      DEG MIN    DEG MIN     YR MO DY YR MO DY LEN   MN  INSTR WATER  TYPE  SENSOR
                                                                                  T C

6424   71 58. 0 125 15. 0  80 12   9 81   2   4  57  60     -       -    MECH

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WATER LEVEL DATA SET NUMBER:81-0017      YEAR: 1981

 STN    LAT        LON           START       STOP    EFF   DT      DEPTHS      INST  ADDIT
      DEG MIN    DEG MIN     YR MO DY YR MO DY LEN   MN  INSTR WATER  TYPE  SENSOR
                                                                                  T C

6443   70 31. 0 128 21. 0  81   7 20 81 11 14 117   60     -       -    AAND
6472   70 16. 0 129 39. 0  81   7 23 81 11 12 112   60     -       -    AAND
6476   69 57. 0 131 28. 0  81   7 18 81   9 10  55   60     -       -    AAND
6476   69 57. 0 131 28. 0  81   8 10 81 10 16  67   60     -       -    AAND
6499   69 27. 0 135 36. 0  81   7 17 81 11   6 112   60     -       -    AAND

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APPENDIX 1

REMARKS AND LISTS OF ERRORS BY DATA SET NUMBER

This appendix lists reasons for the assignment of low data rating numbers, errors found in the computer scan of some of the bottle cast data (see Section 5.3) and any other remarks pertaining to the data sets. The comments and listings are arranged sequentially by data set number. Data sets for which no remarks or listings were necessary are not listed.

Data Set 35-0001

The data consist of a few widely scattered surface measurements, with low salinity accuracies. The locations have not been plotted in Section 9 nor listed in Section 10.

Data Set 37-0001

See 35-0001.

Data Set 50-0001

Details of the measurement methods and accuracies were not given in the report. The entries in Table 1 were made assuming standard practice for the time. 146 bathythermographs and 37 hours of Ekman current observations (not included in the report) were also taken. A list of errors found in scanning the data is appended below:

Station	Date	Errors
43	21 Aug.	1 Density inversion
48	22 Aug.	1 Density inversion 1 Salinity > 34.9^{o}/oo
49	23 Aug.	4 Salinities > 34.9^{o}/oo
50	23 Aug.	1 Density inversion 2 Salinities > 34.9^{o}/oo
51	23 Aug.	1 Salinity > 34.9^{o}/oo

Data Set 51-0002

Estimates of precision and accuracy were not given in the report; entries in Table 1 were made assuming standard practice for the time. A list of errors found in scanning the data is appended below:

Station	Date	Errors
6	20 Aug.	1 Temperature > 0.5^{o}C @ 500 m
14	25 Aug.	1 Density Inversion

Data Set 52-0001

Salinity, temperature and oxygen measurements are reported as having been taken using standard oceanographic practice at the time: temperatures were measured using reversing thermometers and bathythermographs, while salinity and oxygen samples were drawn from bottles and titrated on board. Problems encountered with the thiosulphate standard rendered the oxygen data suspect; the requirements of a rapid survey reduced the accuracy of the salinity titrations. Numerical estimates of precision and accuracy were not given; probable values are listed in Table 1.

A list of errors found in scanning the data is appended below:

Station	Date	Errors
2	19 July	1 Density inversion
3	19 July	1 Density inversion
7	20 July	1 Density inversion
55	31 July	2 Density inversions
58	31 July	1 Density inversion
67	3 Aug.	1 Density inversion 1 Salinity > 34.9°/oo
71	3 Aug.	2 Salinities > 34.9°/oo
108	15 aug.	1 Density inversion
111	16 Aug.	1 Density inversion
116	16 Aug.	1 Density inversion
127	19 Aug.	1 Density inversion
132	19 aug.	4 Salinities > 34.9°/oo
133	20 Aug.	3 Salinities > 34.9°/oo
136	20 Aug.	1 Salinity > 34.9°/oo
137	20 Aug.	3 Salinities > 34.9°/oo
149	23 Aug.	1 Salinity > 34.9°/oo
156	23 Aug.	2 Salinities > 34.9°/oo
174	26 Aug.	1 Salinity > 34.9°/oo
175	26 Aug.	1 Salinity > 34.9°/oo
176	26 Aug.	1 Salinity > 34.9°/oo
183	30 Aug.	1 Salinity > 34.9°/oo

Data Set 53-0004

The record is only 3 days long, and no information as to the exact location or measurement method is given. Therefore it has not been plotted in Section 9 or listed in Section 10.

Data Set 54-0001

A list of errors found in scanning the data is appended below:

Station	Date	Errors
76	2 Sept.	1 Density inversion
79	5 Sept.	1 Density inversion
89	12 Sept.	1 Salinity > 34.9°/oo
92	13 Sept.	1 Density inversion 3 Salinities > 34.9°/oo
93	13 Sept.	1 Density inversion 1 Salinity > 34.9°/oo

Data Set 62-0001

Estimates of precision and accuracy shown in Table 1 were assumed from the description of methods in the report. A list of errors found in scanning the data is appended below:

Station	Date	Errors
3	25 July	1 Density inversion
4	31 July	1 Density inversion
9	12 aug.	1 Density inversion

Date Set 62-0002

A list of errors found in scanning the data is appended below.

Station	Date	Errors
6	28 April	1 Density inversion
28	29 April	1 Density inversion
59	12 May	1 Density inversion
81	31 May	1 Density inversion

Data Set 62-0003

The data taken with the portable salinometer were of low precision. The high number of errors detected in the computer scan led to the assignment of a 1 rating. The list of errors is appended below.

Station	Date	Errors
2	26 Nov.	2 Density inversions
3	26 Nov.	1 Density inversion
4	27 Nov.	2 Density inversions
5	27 Nov.	1 Density inversion
7	28 Nov.	1 Density inversion
10	28 Nov.	1 Density inversion
11	28 Nov.	1 Density inversion
13	29 Nov.	1 Density inversion
18	30 Nov.	1 Density inversion
21	30 Nov.	1 Density inversion
22	30 Nov.	1 Density inversion
23	30 Nov.	2 Density inversions
24	30 Nov.	2 Density inversions
26	30 Nov.	2 Density inversions
28	30 Nov.	2 Density inversions
30	1 Dec.	3 Density inversions
36	3 Dec.	1 Density inversion
37	3 Dec.	1 Density inversion
39	3 Dec.	1 Density inversion
42	3 Dec.	1 Density inversion
43	4 Dec.	2 Density inversions
44	4 Dec.	1 Density inversion
45	4 Dec.	1 Density inversion

Station	Date	Errors
46	4 Dec.	1 Density inversion
51	4 Dec.	2 Density inversions
52	4 Dec.	1 Density inversion
53	4 Dec.	1 Density inversion
55	5 Dec.	1 Density inversion
60	5 Dec.	2 Density inversions
61	5 Dec.	1 Density inversion
62	5 Dec.	2 Density inversions
63	5 Dec.	2 Density inversions
73	7 Dec.	1 Density inversion
74	7 Dec.	1 Density inversion
76	8 Dec.	3 Density inversions
77	8 Dec.	4 Density inversions
78	8 Dec.	1 Density inversion
79	9 Dec.	1 Density inversion
81	9 Dec.	1 Density inversion

Data Set 63-0001

Precision and acccuracy estimates given in Table 1 were assumed from the description of methods and instruments given in the report. The list of errors found in the computer scan is given below:

Station	Date	Errors
3	30 July	1 Density inversion
4	31 July	1 Density inversion
5	1 Aug.	2 Density inversions
6	3 Aug.	1 Density inversion
10	13 Aug.	2 Density inversions
13	20 Aug.	2 Density inversions

Data Set 63-0002

The data taken with the portable salinometers were of low precision (as for set 62-0003). The lower number of errors found in the computer scan, allowed the assignment of a 3 rating. The list of errors found is appended below:

Station	Date	Errors
1	2 May	3 Density inversions
2	2 May	1 Density inversion
3	2 May	1 Density inversion
4	2 May	1 Density inversion
5	2 May	1 Density inversion
6	3 May	1 Density inversion
7	3 May	1 Density inversion
8	3 May	1 Density inversion
1	4 May	1 Density inversion
4	4 May	1 Density inversion
8	5 May	1 Density inversion

Data Set 64-0003

Some doubts as to the quality of this particular record have been expressed by Canadian Hydrographic Service personnel. It was among those rejected for analysis by Henry and Foreman (1977).

Data Set 66-0001

The "errors present" asterisk refers to the numerous and lengthy periods (especially in the winter) during which this gauge has been out of operation.

Data Set 70-0001

Erratic salinity values of uncertain origin were found during analysis of this data (Coachman and Newton, 1972). The most likely cause was thought to be poor temperature control of the samples in the tents on the ice. Salinity values suspected of being erroneous have been deleted from the data set by its originators. The list of errors found in the computer scan is given below:

Station	Date	Errors
2	24 March	4 Density inversions
3	26 March	3 Density inversions
4	26 March	1 Density inversion
5	26 March	2 Density inversions
6	27 March	1 Density inversion
7	27 March	2 Density inversions
8	27 March	1 Density inversion
9	29 March	3 Density inversions
10	29 March	2 Density inversions
11	29 March	1 Density inversion
12	30 March	5 Density inversions
13	30 March	4 Density inversions
16	26 March	1 Density inversion
17	27 March	1 Density inversion
18	27 March	2 Density inversions
20	29 March	1 Density inversion
21	29 March	1 Density inversion
23	30 March	4 Density inversions
24	24 March	3 Density inversions 1 Salinity > 34.9^{o}/oo

Data Set 70-0002

The list of errors found in the computer scan is given below:

Station	Date	Errors
251	30 Aug.	4 Salinities > 34.9^{o}/oo
256	6 Sept.	1 Density inversion
257	6 Sept.	2 Density inversions
272	24 Sept.	1 Density inversion
274	24 Sept.	1 Density inversion

Data Set 70-0003

These data are of low precision, but have not been investigated for errors, with the exception of the computer scan of the temperature and salinity data. The results of the scan are given below:

Station	Date	Errors
12	19 July	1 Density inversion
15	19 July	1 Density inversion
22	22 July	1 Density inversion
26	24 July	1 Density inversion
29	24 July	1 Density inversion
30	24 July	1 Density inversion
32	24 July	1 Density inversion
36	27 July	1 Density inversion
38	28 July	1 Density inversion

Data Set 70-0005

This data set is suspect and of limited usefulness because of gaps in documentation. No exact locations were reported and only partial data records were displayed. The set therefore has not been plotted on the maps and has been assigned a rating of 1.

Data Set 71-0001

The list of errors found in the computer scan is shown below:

Station	Date	Errors
9	28 Aug.	1 Density inversion

Date Set 71-0003

The list of errors found in the computer scan is shown below:

Station	Date	Errors
4	19 March	1 Salinity $> 34.9^{o}/oo$
5	19 March	1 Salinity $> 34.9^{o}/oo$
120	27 March	1 Density inversion
125	28 March	1 Salinity $> 34.9^{o}/oo$
162	23 March	1 Density inversion
171	31 March	1 Density inversion

Date Set 71-0004

The list of errors found in the computer scan is shown below:

Station	Date	Errors
12	15 Dec.	2 Density inversions

Data Set 72-0001

The list of errors found in the computer scan is shown below:

Station	Date	Errors
4	24 March	2 Density inversions
5	25 March	2 Density inversions
6	25 March	1 Density inversion
7	27 March	1 Density inversion
9	27 March	1 Density inversion
10	27 March	1 Density inversion
11	31 March	1 Density inversion
12	31 March	1 Density inversion 1 Salinity > 34.9^{o}/oo
15	1 April	1 Density inversion
16	1 April	1 Density inversion
17	2 April	1 Density inversion
19	2 April	1 Density inversion
21	2 April	1 Density inversion
22	3 April	1 Density inversion
23	3 April	1 Density inversion
24	3 April	1 Density inversion
25	3 April	1 Density inversion
26	3 April	1 Density inversion
29	7 April	1 Density inversion
30	7 April	2 Density inversions
31	7 April	1 Density inversion

Data Set 72-0004

The list of errors found in the computer scan is shown below:

Station	Date	Errors
1	17 March	3 Density inversions
2	18 May	1 Density inversion
4	22 July	2 Density inversions
5	23 July	1 Density inversion
6	28 July	1 Density inversion
10	10 Aug.	1 Density inversion
11	11 Aug.	1 Density inversion
12	17 Aug.	2 Density inversions
17	23 Aug.	1 Density inversion
22	25 Aug.	1 Density inversion

Station	Date	Errors
27	26 Aug.	1 Density inversion
29	28 Aug.	1 Density inversion
30	29 Aug.	1 Density inversion
31	29 Aug.	1 Density inversion
32	4 Sept.	1 Density inversion

Data Set 73-0002

The list of errors found in the computer scan is shown below:

Station	Date	Errors
12	19 July	1 Density inversion
15	3 Aug.	1 Density inversion
20	23 Aug.	1 Density inversion
21	23 Aug.	2 Density inversions
22	30 Sept.	1 Density inversion
23	1 Oct.	1 Density inversion

Data Set 73-0003A & 73-0003B

The set was subdivided because of the difference in methods and precision between the two parts.

Data Set 74-0005

The directional distributions of the bottom currents are exceptionally narrow; some doubts have been expressed as to their validity.

Data Set 74-0007A & 74-0007B

The set was subdivided because of the large gap in time between the 2 parts.

Data Set 74-0010A & 74-0010B & 74-0010C

See 74-0007A & B.

Data Set 74-0019

No exact dates for station occupations were given in the report. No calibration or precision information was given for the instrument used. the precision in Table 1 has been assumed from manufacturer's specifications. A rating of 1 has therefore been given to this data set.

Data Set 74-0020

No exact station locations were given, nor were water depths or some sampling depths. Some salinities reported only as >1. Some conductivities reported without temperatures.

Data Set 74-0021

No exact dates for station occupations were given in the report. No calibration or precision information was given for the instrument used. The precision in Table 1 has been assumed from manufacturer's specifications. A rating of 1 has therefore been given to this data set.

Data Set 74-0022

No information concerning sampling depths or instrument precision was given.

Data Set 75-0001

The authors of the data report state that temperatures measured by the Hydrolabs were frequently below the freezing point of seawater and that results from that instrument should be regarded as qualitative rather than quantitative. The comments above do not apply to the remainder of this data set.

Data Set 75-0007

The directional distributions of the bottom currents are exceptionally narrow; some doubts have been expressed as to their validity.

Data Set 75-0010A & 75-0010B

See 74-0007A & B.

Data Set 75-0024

No exact station locations, nor were water depths or same sampling depths. Some salinities reported only as >1. Some conductivities reported without temperatures.

Data Set 75-0025

No exact dates for station occupations were given in the report. No calibration or precision information was given for the instrument used. The precision in Table 1 has been assumed from manufacturer's specifications. A rating of 1 has therefore been given to this data set.

Data Set 75-0026

Measurements were made at control sites and at sites artificially contaminated by crude oil. Only the control stations have been included here.

Data Set 75-0028

Measurements were made at control sites and at sites artificially contaminated by crude oil. Only the control stations have been included here.

Data Set 76-0001

The current measurements were taken with meters mounted on the drillships. Many of the records are significantly contaminated by mooring motion (Fissel, 1981). The near-bottom records are the least affected. The temperature and salinity data have not been examined.

Data Set 77-0004

The current measurements were taken with meters mounted on the drillships. Many of the records are significantly contaminated by mooring motion (Fissel, 1981). The near-bottom records are the least affected. The temperature and salinity data have not been examined.

Data Set 78-0001

The current measurements were taken with meters mounted on the drillships. Many of the records are significantly contaminated by mooring motion (Fissel, 1981). The near-bottom records are the least affected. The temperature and salinity data have not been examined.

Data Set 79-0003

The current measurements were taken with meters mounted on the drillships. Many of the records are significantly contaminated by mooring motion (Fissel, 1981). The near-bottom records are the least affected. The temperature and salinity data have not been examined.

Data Set 80-0016

Salinity values were not reproducible. It was thought that the cause was ice crystallizing in the conductivity cell. (In the investigator's opinion, the salinity profiles are still useful in a relative sense.) The salinity values were therefore given a 0 rating. Because the cause of the salinity errors was not definitely found, the possiblility of an instrument malfunction affecting the temperature remains. The temperature data have therefore been given a rating of 1.

Data Set 81-0015

Calibration errors rendered the profiles of temperature and salinity incorrect. The investigators feel they may be useful in a relative sense and that the calibration errors may be corrected in future. Until that occurs, a rating of zero has been assigned, and the data set has not been plotted or entered in the indexes.

APPENDIX 2

LIST OF ABBREVIATIONS AND ADDRESSES FOR DATA SOURCES

MEDS: Marine Environmental Data Services, 7th Floor West, 240 Sparks Street, Ottawa, Ontario, K1A 0E6.

NODC: National Oceanographic Data Centre, National Oceanic and Atmospheric Administration, 2001 Wisconsin Avenue N.W., Washington, D.C., 20235, U.S.A. (in Canada, contact via MEDS).

IOS: Institute of Ocean Sciences, P.O. Box 6000, Sidney, B.C, V8L 4B2.

CHS: Canadian Hydrographic Service (for western Arctic data, contact Tidal Information at the Institute of Ocean Sciences).

AIDJEX: Arctic Ice Dynamics Joint Experiment.
(Originally centered at the University of Washington, Seattle, the project is now disbanded. Most oceanographic data were filed at NODC, the remainder are being processed at Lamont-Doherty Geological Observatory, Palisades, N.Y. - contact Dr. T.O. Manley).

ABS: Arctic Biological Station, Fisheries and Marine Service, Dept. of the Environment, P.O. Box 400, Ste. Anne de Bellevue, P.Q., H9X 3L6.

USNHO: U.S. Navy Hydrographic Office, Washington, D.C., U.S.A. (now part of the U.S. Naval Oceanographic Office).

USNOO: U.S. Naval Oceanographic Office, Washington, D.C. 20390, U.S.A.

CANMAR: Canadian Marine Drilling Ltd. - see Dome Petroleum below.

INDUSTRIAL SOURCES: Data from industrial sources frequently is filed with government regulatory agencies, and may be available from them. For western Arctic data, contact the Ocean Information Division at the Institute of Ocean Sciences (listed above). Failing that, the companies themselves may have archived data. As organizational divisions and personnel often change within the companies it is best to contact the company and request the division concerned with environmental or engineering design data collection. Companies which have collected data included in this inventory are:

Dome Petroleum Ltd.: (includes Dome Canada and Canmar)
Beaufort Sea Division
P.O. Box 200
Calgary, Alberta T2P 2H8.

Imperial Oil Ltd.: exploratory activities now performed by Esso Resources Canada Ltd., which see.

Esso Resources Canada Ltd.: Research Dept.
339-50th Ave. S.E.
Calgary, Alberta T2G 2B3.

Volumes currently available.

1. Beaufort Sea: Physical Oceanography - Temperature, Salinity, Currents and Water Levels.